CORTEX PHARMACEUTICALS INC/DE/
Form 10-K
October 14, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

[X] **Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the fiscal year ended December 31, 2012

OR

[ ] **Transition Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Commission file number 1-16467

Cortex Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**33-0303583**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

126 Valley Road, Suite C

Glen Rock, New Jersey 07452

(Address of principal executive offices, including zip code)

(201) 444-4947

(Registrant's telephone number, including area code)

Securities registered under Section 12(b) of the Act: None

Securities registered under Section 12(g) of the Act:

Common Stock, $0.001 par value

(Title of Class)

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES [ ] NO [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. YES [ ] NO [X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. YES [ ] NO [X]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES [ ] NO [X]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of “accelerated filer,” “large accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer [ ] Accelerated filer [ ] Non-accelerated filer [ ] Smaller reporting company [X]
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2). YES [ ] NO [X]

The aggregate market value of the voting stock held by non-affiliates as of June 30, 2012 was approximately $5,300,000 (based on the closing sale price of the common stock as reported by the Over the Counter Bulletin Board). As of December 31, 2012, there were 144,041,556 shares of the registrant’s common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE: NONE

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In this Annual Report on Form 10-K, the terms “Cortex,” the “Company,” “we,” “us” and “our” refer to Cortex Pharmaceutica Inc., a Delaware corporation, and, unless the context indicates otherwise, its consolidated subsidiaries. This Annual Report on Form 10-K is being filed by new management substantially after the deadline for its filing. In an effort to provide the most current information, at various points in the document, information regarding events that occurred after December 31, 2012 has been included.

INTRODUCTORY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”) and we intend that such forward-looking statements be subject to the safe harbors created thereby. These forward-looking statements, which may be identified by words including “anticipates,” “believes,” “intends,” “estimates,” “expects,” “plans,” and similar expressions include, but are not limited to, statements regarding (i) future research plans, expenditures and results, (ii) potential collaborative arrangements, (iii) the potential utility of our proposed products and (iv) the need for, and availability of, additional financing.

The forward-looking statements included herein are based on current expectations that involve a number of risks and uncertainties. These forward-looking statements are based on assumptions regarding our business and technology, which involve judgments with respect to, among other things, future scientific, economic and competitive conditions, and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond our control. Although we believe that the assumptions underlying the forward-looking statements are reasonable, actual results may differ materially from those set forth in the forward-looking statements. In light of the significant uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that our objectives or plans will be achieved.

Forward-looking statements speak only as of the date they are made. We do not undertake and specifically decline any obligation to update any forward-looking statements or to publicly announce the results of any revisions to any statements to reflect new information or future events or developments.

PART I

Item 1. Business

Since its formation in 1987, the Company has engaged in the discovery, development and commercialization of innovative pharmaceuticals for the treatment of neurological and psychiatric disorders. In 2011, however, we conducted a re-evaluation of our strategic focus and determined that clinical development in the area of respiratory disorders, particularly respiratory depression and sleep apnea, provided the most cost-effective opportunities for potential rapid development and commercialization of our compounds. As a result of our scientific discoveries and the acquisition of strategic, exclusive license agreements, we believe we are now a leader in the discovery and development of innovative pharmaceuticals for the treatment of respiratory disorders.

Saying that there exists an unmet need for new drug treatments for breathing disorders is an understatement. According to the Centers for Disease Control and Prevention, the rate of respiratory disorders is reaching epidemic proportions, with estimates that 1 in 4 men and 1 in 10 women in this country have sleep apnea. Sleep apnea places a considerable burden on society and the health care system because of its association with adverse events ranging from loss of productivity to increased risk of cardiopulmonary illness and related death. No drugs currently are approved for the treatment of sleep apnea.

Even in patients without sleep apneas, the use of drugs such as propofol, used as an anesthetic during surgery, and opioid analgesics such as morphine, used for the treatment of post-surgical and chronic pain, are well known for producing respiratory depression. In fact, while respiratory depression is the leading cause of death from the overdose of most classes of abused drugs, it also arises during normal, physician-supervised procedures such as surgical anesthesia, post-operative analgesia and as a result of normal outpatient management of pain.

Although naloxone (Narcan) and nalmefene (Revex) can reverse respiratory depression associated with opioids, they have several major shortcomings. First and foremost, these opioid antagonists do not reverse the respiratory depression produced by other classes of drugs often given/taken either alone or in combination with narcotics. Second, while these drugs reverse the serious side effects of the opioids, they also dramatically reduce their analgesic effectiveness. Third, the side effects of opioid antagonists are themselves serious and include seizures, agitation, convulsions, tachycardia, hypotension, nausea, and vomiting.

Clearly, considerable need exists for pharmaco-therapeutic agents to 1.) treat sleep apnea, and 2.) prevent and reverse the respiratory depression produced by different classes of drugs. The Company currently has two drug platforms, each with a clinical stage compound directed at these needs.

Sleep Apnea

Sleep apnea is a serious disorder in which breathing repeatedly stops long enough to disrupt sleep, and temporarily decreases the amount of oxygen and increases the amount of carbon dioxide in the blood. Apnea is defined by more than five periods per hour of ten seconds or longer without breathing. The repetitive cessation of breathing during sleep has substantial impact on the affected individuals. The disorder is associated with major co-morbidities including excessive daytime sleepiness and increased risk of cardiovascular disease (such as hypertension, stroke and heart failure), diabetes and weight gain. Sleep apnea is often made worse by central nervous system depressants such as opioids, benzodiazepines, barbiturates and alcohol. It is therefore important for these patients to seek therapy.

The most common type of sleep apnea is obstructive sleep apnea (“OSA”), which occurs by repetitive narrowing or collapse of the pharyngeal airway during sleep. There is currently no approved pharmacotherapy, and the most common treatment is to use continuous positive airway pressure (“CPAP”) delivered via a nasal or full-face mask, as long as patients are able to tolerate the treatment. It is estimated that in more than 50% of cases patients stop using the CPAP device on a regular basis. Given the large patient population and a lack of suitable treatment options, there is a very large opportunity for pharmacotherapy to treat this disorder.

Central sleep apnea (“CSA”), a less frequently diagnosed type of sleep apnea, is caused by alterations in the brain mechanisms responsible for maintaining normal respiratory drive. CSA is most frequently observed in heart failure patients and in patients taking chronic opioids. In fact, CSA is a predictor of mortality in heart failure patients. CPAP has not demonstrated efficacy in treating CSA and no drugs presently are approved for this indication.

Mixed sleep apnea, a third type of sleep apnea, is a combination of central and obstructive factors occurring in the same episode of sleep apnea.

Drug-induced Respiratory Depression

Drug-induced respiratory depression ("RD") is a life-threatening condition caused by a variety of depressant drugs, including analgesic, hypnotic, and anesthesia medications. RD is a leading cause of death from the overdose of some classes of abused drugs, yet it also arises during normal, physician-supervised procedures such as surgical anesthesia and post-operative pain management. For example, in the hospital setting, anesthetics, such as propofol, are well known for their propensity to produce RD. With more than 40 million surgical procedures performed annually, it is notable that post-operative respiratory failure produces the highest mortality rate, the second highest attributable number of deaths and the second largest overall excess cost to the Medicare system, when compared to other patient safety indicators.

In the hospital setting, the most serious complication of patient-controlled analgesia is RD and, despite nurses' vigilance, adverse events associated with opioids continue to increase. Drug-induced RD is associated with a high mortality rate relative to other adverse drug events. If high-risk patients are receiving combination therapies, they are at even higher risk.

Outside the hospital, the primary risk factor for RD is the use of a single opioid in large doses or concomitant use of opioids and sedative agents. Whether as a result of normal outpatient management of pain or as a result of substance abuse, RD has been reported to be the leading cause of death from drug overdose, with the drug overdose death rate tripling since 1991. It has been estimated that nearly 15,000 people die every year as a result of overdoses involving prescription painkillers. Oxycodone and fentanyl have been reported to be the two most frequently reported drugs associated with death and serious nonfatal outcomes from 1998 to 2005, exceeding the number of deaths from heroin and cocaine combined. Opioid use has increased significantly along with a dramatic increase in unintentional poisoning deaths from opioids. Unintentional deaths from opioids are not only related to diversion for nonmedical use and misuse by patients, but by prescriber's error as well.

Cannabinoids

In order to expand the Company's respiratory disorders program, on August 10, 2012, pursuant to an Agreement and Plan of Merger by and among Pier Pharmaceuticals Inc., a privately-held corporation, ("Pier") Pier Acquisition Corp., a Delaware corporation ("Merger Sub") and a wholly-owned subsidiary of Cortex, and Cortex, Merger Sub merged with and into Pier (the "Merger") and Pier became a wholly-owned subsidiary of Cortex. Pier had been formed in June 2007 (under the name SteadySleep Rx Co.) as a clinical stage pharmaceutical company to develop a pharmacologic treatment for the respiratory disorder known as obstructive sleep apnea and had been engaged in research and clinical development activities since formation.

Through the Merger, the Company gained access to an Exclusive License Agreement, as amended (the "License Agreement"), that Pier had entered into with the University of Illinois on October 10, 2007. The License Agreement covered certain patents and patent applications in the United States and other countries claiming the use of certain compounds referred to as cannabinoids for the treatment of sleep related breathing disorders (including sleep apnea), of which dronabinol is a specific example of one type of cannabinoid. Dronabinol is a synthetic derivative of the naturally occurring substance in the cannabis plant, otherwise known as Δ9-THC (Δ9-tetrahydrocannabinol). Dronabinol is currently approved by the U. S. Food and Drug Administration ("FDA") and is sold generically for use in refractory chemotherapy-induced nausea and vomiting, as well as for anorexia in patients with AIDS. The License Agreement was terminated effective March 21, 2013 due to the Company's failure to make a required payment.

However, on June 27, 2014, the Company entered into a new license agreement with the Board of Trustees of the University of Illinois . In exchange for certain milestone and royalty payments, the License Agreement grants the Company (i) exclusive rights to several issued and pending patents in numerous jurisdictions and (ii) the non-exclusive right to certain technical information that is generated by the University of Illinois in connection with certain clinical trials as specified in the License Agreement, all of which relate to the use of cannabinoids for the treatment of sleep related breathing disorders. The Company is developing dronabinol for the treatment of OSA, the most common form of sleep apnea.

The Company previously conducted a 21 day, randomized, double-blind, placebo-controlled, dose escalation Phase 2 clinical study in 22 patients with OSA, in which dronabinol produced a statistically significant reduction in the Apnea-Hypopnea Index (AHI), the primary therapeutic end-point, and was observed to be safe and well tolerated. Dronabinol is currently under investigation, at the University of Illinois and other centers, in a potentially pivotal Phase 2 OSA clinical trial, fully funded by the National Institutes of Health.

Dronabinol is a Schedule III, controlled generic drug with a relatively low abuse potential that is approved by the FDA for the treatment of AIDS related anorexia and chemotherapy induced emesis. The use of dronabinol for the treatment of OSA is a novel indication for an already approved drug and, as such, the Company believes that it should only require approval by the FDA of a supplemental new drug application.

Ampakines

Since its founding, the Company has been engaged in the research and clinical development of a class of compounds referred to as ampakines. By acting as positive allosteric modulators of AMPA glutamate receptors, ampakines increase the excitatory effects of the neurotransmitter glutamate. Early preclinical and clinical research suggested that these ampakines might have therapeutic potential for the treatment of memory and cognitive disorders, depression, attention deficit disorder and schizophrenia. Given our current focus on respiratory disorders, we may seek to partner, out-license or sell our rights to the use of ampakine compounds for the treatment of neurological and psychiatric indications, as we focus on the development of our compounds for the treatment of brain-related breathing disorders.

The early ampakines discovered by Cortex, Eli Lilly and Company, and others were ultimately abandoned due to the presence of undesirable side effects, particularly convulsive activity. Subsequently, Cortex scientists discovered a new, chemically distinct series of molecules termed “low impact” as opposed to the “high impact” designation given to the earlier compounds. While these low impact compounds shared many pharmacological properties with the high impact compounds, they did not produce convulsive effects in animals. These low impact compounds do not bind to the same molecular site as the high impact compounds and, as a result, do not produce the undesirable electrophysiological and biochemical effects that lead to convulsive activity.

The Company owns patents and patent applications for certain families of chemical compounds that claim the chemical structures and their use in the treatment of various disorders. These patents cover, among other compounds, the Company’s lead ampakines CX1739 and CX1942 and extend through at least 2028.

In order to broaden the use of the Company’s ampakine technology into the area of respiratory disorders, on May 8, 2007, the Company entered into a license agreement, as subsequently amended, with the University of Alberta granting the Company exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. These patents, along with the Company’s own patents claiming chemical structures, comprise the Company’s principal intellectual property supporting the Company’s research and clinical development program in the use of ampakines for the treatment of respiratory disorders.

The Company has obtained pre-clinical results indicating that several of its low impact ampakines, including CX717, CX1739 and CX1942, were able to antagonize the respiratory depression caused by opioids, barbiturates and anesthetics without offsetting the analgesic effects of the opiates or the sedative effects of the anesthetics. Dr. John Greer, Director of the Neuroscience and Mental Health Institute at the University of Alberta, has shown that these ampakine effects are due to a direct action on neurons in pre-Botzinger’s complex, a brain stem region responsible for regulating respiratory drive.

After several Phase 1 and 2 studies to demonstrate safety and tolerability, the first of these low impact compounds, CX717, was tested in two Phase 2A clinical studies to determine its ability to antagonize the respiratory depressant effects of fentanyl, a potent opioid analgesic. In both of these studies, one of which was published in a peer-reviewed journal, CX717 antagonized the respiratory depression produced by fentanyl without altering the analgesia produced by this drug.

After considerable delay in the development of CX717, due to regulatory issues with the FDA, the Company finally has decided to terminate development of this compound because of the impending loss of its U.S. patents in 2017 and international patents in 2018. Nevertheless, the Company believes that CX717 has demonstrated clinical proof of principle for the use of low impact ampakines in the treatment of opioid-induced respiratory depression.

The Company's present lead ampakine, CX1739, has demonstrated safety and tolerability in several Phase 1 clinical studies, with maximum well-tolerated single dose identified as 900mg and 450 mg twice-a-day (for a 900mg total daily dose) for 7 days. Pharmacokinetic results to date from the volunteers who have taken CX1739 show that drug absorption over the range of 50mg to 1200mg was linear and predictable, with an approximate half-life of 8 hours.

The Company has conducted a single dose, randomized, double-blind, placebo-controlled study with CX1739 in 20 subjects with moderate to severe sleep apnea. Analysis of a range of sleep apnea parameters assessed by overnight polysomnography revealed that, while a single dose of CX1739 improved a number of sleep apnea parameters across most of the patients who were given the drug, the primary effects were observed within a sub-group of patients diagnosed with either central or mixed sleep apnea. CX1739 was safe, but the dose appeared to be near the limits of tolerability. There were no serious adverse events and no clinically relevant changes in vital signs, cardiovascular or other safety assessments.

We believe that the results from this study merit conducting a larger study with CX1739 that will be focused on patients with central and/or mixed sleep apnea. It is possible that repeated daily treatment with CX1739 for several weeks may prove to be tolerated better and with greater efficacy than a single dose. However, given the time and expense necessary to conduct such a clinical trial, the Company is not currently planning to conduct such a study. Instead, subsequent to additional funding, and using a design similar to that in which CX717 demonstrated clinical efficacy, the Company plans to conduct two clinical studies investigating the ability of orally administered CX1739 to antagonize the respiratory depressant effects of fentany and propofol without altering the analgesic and anesthetic effects of these drugs. The Company's short term commercial goals are to obtain FDA approval for the use of orally administered CX1739 for the following indications: 1.) pre-surgical administration for the prevention of respiratory depression produced by propofol and 2.) peri- and post-operative administration in a hospital setting for the prevention of respiratory depression produced by opiods. The Company believes that these goals can be achieved in a timely and cost-effective manner. Longer term goals include obtaining FDA approval for the use oral administration of CX1739 given concomitantly with an opioid analgesic for the safe management of pain in a home setting. The Company believes that successful commercial implementation of these goals will require corporate partnership.

In addition to CX1739, the Company is developing CX1942, a soluble ampakine, to be used in an injectable formulation as a rescue medication for the emergency treatment of drug-induced respiratory depression. Animal studies have indicated that intravenously injected CX1942 can reverse the respiratory depression produced by fentanyl. In October 2014, the Company intends to begin a study, funded by the National Institute of Drug Abuse, to determine the parameters whereby CX1942 is able to reverse the respiratory depression and lethality produced by a number of respiratory depressant drugs, including opioids. One aspect of the study will be to determine whether intramuscular or subcutaneous injections are as effective as intravenous. Upon completion of this study and the choice of a route of administration, preclinical toxicology and safety studies can be conducted relatively quickly and inexpensively, since the clinical indication supported by these studies is for acute use.

Manufacturing

We have no experience or capability to either manufacture bulk quantities of the new compounds that we develop, or to produce finished dosage forms of the compounds, such as tablets or capsules. We rely, and presently intend to continue to rely, on the manufacturing and quality control expertise of contract manufacturing organizations or current and prospective corporate partners. There is no assurance that we will be able to enter into manufacturing arrangements to produce bulk quantities of our compounds on favorable financial terms. There is, however, substantial availability of both bulk chemical manufacturing and dosage form manufacturing capability throughout the world that we believe we can readily access. See “Risk Factors – *Risks related to our business* – We are at an early stage of development and we may not be able to successfully develop and commercialize our products and technologies” for a discussion of certain risks related to the development and commercialization of our products.

Marketing

We have no experience in the marketing of pharmaceutical products and do not anticipate having the resources to distribute and broadly market any products that we may develop. We will therefore continue to seek commercial development arrangements with other pharmaceutical companies for our proposed products for those indications that require significant sales forces to effectively market. In entering into such arrangements, we may seek to retain the right to promote or co-promote products for certain of the Orphan Drug indications in North America. We believe that there is a significant expertise base for such marketing and sales functions within the pharmaceutical industry and expect that we could recruit such expertise if we choose to directly market a drug. See “Risk Factors—*Risks related to our business*—We are at an early stage of development and we may not be able to successfully develop and commercialize our products and technologies” for a discussion of certain risks related to the marketing of our products.

Employees

As of December 31, 2012, the Company had two employees (both officers), both of which were full time. The Company currently has three employees (all officers), one of which is full time.

Technology Rights

University of California, Irvine License Agreements

The Company entered into a series of license agreements in 1993 and 1998 with the University of California, Irvine ("UCI") that granted the Company proprietary rights to certain chemical compounds that acted as ampakines and their therapeutic uses. These agreements granted the Company, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the license agreement, that were then held by UCI; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the license agreements, subject to the provisions of the license agreements. The Company was required, among other terms and conditions, to pay UCI a license fee, royalties, patent costs and certain additional payments.

Under such license agreements, the Company was required to make minimum annual royalty payments of approximately $70,000. The Company was also required to spend a minimum of $250,000 per year to advance the ampakine compounds until the Company began to market an ampakine compound. The commercialization provisions in the agreements with UCI required the Company to file for regulatory approval of an ampakine compound before October 2012. In March 2011, UCI agreed to extend the required date for filing regulatory approval of an ampakine compound to October 2015. At December 31, 2012, the Company was not in compliance with its minimum annual payment obligations and believed that this default constituted a termination of the license agreements.

University of Alberta License Agreement

On May 8, 2007, the Company entered into a license agreement, as subsequently amended, with the University of Alberta granting the Company exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. The Company agreed to pay the University of Alberta a licensing fee and a patent issuance fee, which were paid, and prospective payments consisting of a royalty on net sales, sublicense fee payments, maintenance payments and milestone payments. The prospective maintenance payments commence on the enrollment of the first patient into the first Phase 2B clinical trial and increase upon the successful completion of the Phase 2B clinical trial. As the Company does not at this time anticipate scheduling a Phase 2B clinical trial, no maintenance payments are currently due and payable to the University of Alberta. In addition, no other prospective payments are currently due and payable to the University of Alberta.

Item 1A. Risk Factors

In addition to the other matters set forth in this Annual Report on Form 10-K, our continuing operations and the price of our common stock are subject to the following risks:

Risks related to our business

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

In its audit opinion issued in connection with our balance sheets as of December 31, 2012 and 2011 and our statements of operations, stockholder's equity, and cash flows for the years ended December 31, 2012 and 2011, our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern given our limited working capital, recurring net losses and negative cash flows from operations. The

accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts of liabilities that might be necessary should we be unable to continue in existence. While we have relied principally in the past on external financing to provide liquidity and capital resources for our operations, we can provide no assurance that cash generated from our operations together with cash received in the future from external financing, if any, will be sufficient to enable us to continue as a going concern.

We have a history of net losses; we expect to continue to incur net losses and we may never achieve or maintain profitability.

Since our formation on February 10, 1987 through the end of our most recent fiscal year ended December 31, 2012, we have generated only modest operating revenues and we have incurred net losses of $128,341,331. We have also experienced additional losses subsequent to this period. For the fiscal year ended December 31, 2012, our net loss approximated $7,572,000 and as of December 31, 2012, we had an accumulated deficit of approximately $128,341,331. For the year ended December 31, 2011, our net loss approximated $2,255,000 and as of December 31, 2011, we had an accumulated deficit of $120,769,087. We have not generated any revenue from product sales to date, and it is possible that we will never generate revenues from product sales in the future. Even if we do achieve significant revenues from product sales, we expect to incur significant net losses over the next several years. As with other companies in the biotechnology industry, it is possible that we will never achieve profitable operations.

We will need additional capital in the future and, if such capital is not available on terms acceptable to us or available to us at all, we may need to scale back our research and development efforts and may be unable to continue our business operations.

We will require substantial additional funds to advance our research and development programs and to continue our operations, particularly if we decide to independently conduct later-stage clinical testing and apply for regulatory approval of any of our proposed products, and if we decide to independently undertake the marketing and promotion of our products. Additionally, we may require additional funds in the event that we decide to pursue strategic acquisitions of or licenses for other products or businesses. Based on our operating plan as of December 31, 2012, we estimated that our existing cash resources may not be sufficient to meet our requirements for 2013. We believe that we will require additional capital to fund on-going operations. Additional funds may result from agreements with larger pharmaceutical companies that include the license or rights to the technologies and products that we are currently developing, although there is no assurance that we will secure such a transaction in a timely manner, or at all. Additional funds also may result from the exercise of warrants to purchase shares of our common stock. As of December 31, 2012, warrants to purchase up to 12,357,884 shares of our common stock were outstanding at exercise prices ranging from $0.056 to $0.370 per share. None of the outstanding warrants as of December 31, 2012 were “in the money” as of such date.

Our cash requirements in the future may differ significantly from our current estimates, depending on a number of factors, including:

- the results of our clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs of setting up and operating our own marketing and sales organization;
- the ability to obtain funding under contractual and licensing agreements;
- the costs involved in obtaining and enforcing patents or any litigation by third parties regarding intellectual property; and
- our success in entering into collaborative relationships with other parties.

To finance our future activities, we may seek funds through additional rounds of financing, including private or public equity or debt offerings and collaborative arrangements with corporate partners. We cannot say with any certainty that we will be able to obtain the additional needed funds on reasonable terms, or at all. The sale of additional equity or convertible debt securities could result in additional and possibly substantial dilution to our stockholders. If we issued preferred equity or debt securities, these securities could have rights superior to holders of our common stock, and such instruments entered into in connection with the issuance of securities could contain covenants that will restrict our operations. We might have to obtain funds through arrangements with collaborative partners or others that may

require us to relinquish rights to our technologies, product candidates or products that we otherwise would not relinquish. In early March 2009 and again in August 2011, we reduced our workforce in an effort to conserve our capital resources. In 2012, several members of management departed. If adequate funds are not available in the future, as required, we could lose our key employees and might have to further delay, scale back or eliminate one or more of our research and development programs, which would impair our future prospects. In addition, we may be unable to meet our research spending obligations under our existing licensing agreements and may be unable to continue our business operations.

Our products rely on licenses from research institutions and if we lose access to these technologies or applications, our business could be substantially impaired.

Under our agreements with The Regents of the University of California, we had exclusive rights to certain ampakine compounds for all applications for which the University had patent rights, other than endocrine modulation. The license securing these rights has since been terminated.

Under a patent license agreement with The Governors of the University of Alberta, we have exclusive rights to the use of certain ampakine compounds to prevent and treat respiratory depression induced by opiate analgesics, barbiturates and anesthetic and sedative agents.

On May 8, 2007, the Company entered into a license agreement, as subsequently amended, with the University of Alberta granting the Company exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. The Company agreed to pay the University of Alberta a licensing fee and a patent issuance fee, which were paid, and prospective payments consisting of a royalty on net sales, sublicense fee payments, maintenance payments and milestone payments. The prospective maintenance payments commence on the enrollment of the first patient into the first Phase 2B clinical trial and increase upon the successful completion of the Phase 2B clinical trial. As the Company does not at this time anticipate scheduling a Phase 2B clinical trial, no maintenance payments are currently due and payable to the University of Alberta. In addition, no other prospective payments are currently due and payable to the University of Alberta.

Through the merger with Pier, the Company gained access to an Exclusive License Agreement (as amended, the Pier License Agreement), that Pier had entered into with the University of Illinois on October 10, 2007. The Pier License Agreement covered certain patents and patent applications in the United States and other countries claiming the use of certain compounds referred to as cannabinoids for the treatment of sleep related breathing disorders (including sleep apnea), of which dronabinol is a specific example of one type of cannabinoid. Dronabinol is a synthetic derivative of the naturally occurring substance in the cannabis plant, otherwise known as Δ9-THC (Δ9-tetrahydrocannabinol). Dronabinol is currently approved by the FDA and is sold generically for use in refractory chemotherapy-induced nausea and vomiting, as well as for anorexia in patients with AIDS. Pier's business plan was to determine whether dronabinol would significantly improve subjective and objective clinical measures in patients with obstructive sleep apnea. In addition, Pier intended to evaluate the feasibility and comparative efficacy of a proprietary formulation of dronabinol. The Pier License Agreement was terminated effective March 21, 2013 due to the Company's failure to make a required payment and on June 27, 2014, the Company entered into a new license agreement with the University of Illinois similar, but not identical, to the Pier License Agreement that had been terminated. If we are unable to comply with the terms of the new license agreement, such as required payments thereunder, we risk the new license agreement being terminated.

We are at an early stage of development and we may not be able to successfully develop and commercialize our products and technologies.

The development of ampakine products and cannabinoid products is subject to the risks of failure commonly experienced in the development of products based upon innovative technologies and the expense and difficulty of obtaining approvals from regulatory agencies. Drug discovery and development is time consuming, expensive and unpredictable. On average, only one out of many thousands of chemical compounds discovered by researchers proves to be both medically effective and safe enough to become an approved medicine. All of our proposed products are in the preclinical or early clinical stage of development and will require significant additional funding for research, development and clinical testing before we are able to submit them to any of the regulatory agencies for clearances for

commercial use.

The process from discovery to development to regulatory approval can take several years and drug candidates can fail at any stage of the process. Late stage clinical trials often fail to replicate results achieved in earlier studies. Historically, in our industry more than half of all compounds in development failed during Phase 2 trials and 30% failed during Phase 3 trials. We cannot assure you that we will be able to complete successfully any of our research and development activities. Even if we do complete them, we may not be able to market successfully any of the products or be able to obtain the necessary regulatory approvals or assure that healthcare providers and payors will accept our products. We also face the risk that any or all of our products will not work as intended or that they will be unsafe, or that, even if they do work and are safe, that our products will be uneconomical to manufacture and market on a large scale. Due to the extended testing and regulatory review process required before we can obtain marketing clearance, we do not expect to be able to commercialize any therapeutic drug for several years, either directly or through our corporate partners or licensees.

We may not be able to enter into the strategic alliances necessary to fully develop and commercialize our products and technologies, and we will be dependent on our corporate partners if we do.

We are seeking pharmaceutical company partners to develop other major indications for the ampakine compounds and cannabinoids. These agreements would potentially provide us with additional funds in exchange for exclusive or non-exclusive license or other rights to the technologies and products that we are currently developing. Competition between biopharmaceutical companies for these types of arrangements is intense. We cannot give any assurance that our discussions with candidate companies will result in an agreement or agreements in a timely manner, or at all. Additionally, we cannot assure you that any resulting agreement will generate sufficient revenues to offset our operating expenses and longer-term funding requirements.

Risks related to our industry

If we fail to secure adequate intellectual property protection, it could significantly harm our financial results and ability to compete.

Our success will depend, in part, on our ability to obtain and maintain patent protection for our products and processes in the U.S. and elsewhere. We have filed and intend to continue to file patent applications as we need them. However, additional patents that may issue from any of these applications may not be sufficiently broad to protect our technology. Also, any patents issued to us or licensed by us may be designed around or challenged by others, and if such design or challenge is effective, it may diminish our rights.

If we are unable to obtain and maintain sufficient protection of our proprietary rights in our products or processes prior to or after obtaining regulatory clearances, our competitors may be able to obtain regulatory clearance and market similar or competing products by demonstrating the equivalency of their products to our products. If they are successful at demonstrating the equivalency between the products, our competitors would not have to conduct the same lengthy clinical tests that we have or will have conducted.

We also rely on trade secrets and confidential information that we try to protect by entering into confidentiality agreements with other parties. Those confidentiality agreements may be breached, and our remedies may be insufficient to protect the confidential information. Further, our competitors may independently learn our trade secrets or develop similar or superior technologies. To the extent that our consultants, key employees or others apply technological information independently developed by them or by others to our projects, disputes may arise regarding the proprietary rights to such information or developments. We cannot assure you that such disputes will be resolved in our favor.

We may be subject to potential product liability claims. One or more successful claims brought against us could materially impact our business and financial condition.

The clinical testing, manufacturing and marketing of our products may expose us to product liability claims. We have never been subject to a product liability claim, and we require each patient in our clinical trials to sign an informed consent agreement that describes the risks related to the trials, but we cannot assure you that the coverage limits of our insurance policies will be adequate or that one or more successful claims brought against us would not have a material adverse effect on our business, financial condition and result of operations. Further, if one of our ampakine or cannabinoid compounds is approved by the FDA for marketing, we cannot assure you that adequate product liability insurance will be available, or if available, that it will be available at a reasonable cost. Any adverse outcome resulting from a product liability claim could have a material adverse effect on our business, financial condition and results of operations.

We face intense competition that could result in products that are superior to the products that we are developing.

Our business is characterized by intensive research efforts. Our competitors include many companies, research institutes and universities that are working in a number of pharmaceutical or biotechnology disciplines to develop therapeutic products similar to those we are currently investigating. Most of these competitors have substantially greater financial, technical, manufacturing, marketing, distribution and/or other resources than we do. In addition, many of our competitors have experience in performing human clinical trials of new or improved therapeutic products and obtaining approvals from the FDA and other regulatory agencies. We have no experience in conducting and managing later-stage clinical testing or in preparing applications necessary to obtain regulatory approvals. Accordingly, it is possible that our competitors may succeed in developing products that are safer or more effective than those that we are developing and/or may obtain FDA approvals for their products faster than we can. We expect that competition in this field will continue to intensify.

We may be unable to recruit and retain our senior management and other key technical personnel on whom we are dependent.

We are highly dependent upon senior management and key technical personnel and currently do not carry any insurance policies on such persons. In particular, we were highly dependent on our President and Chief Executive Officer, Mark A. Varney, Ph.D. and our Vice President of Preclinical Development, Steven A. Johnson, Ph.D., each of whom entered into employment agreements with us and served in those roles until removed in March 2013. Since our change in management in March 2013, we are now highly dependent on Arnold S. Lippa, our President and Chief Executive Officer, Jeff E. Margolis, our Treasurer and Secretary, and, since his appointment in April 2013, our Chief Financial Officer, Robert N. Weingarten. Competition for qualified employees among pharmaceutical and biotechnology companies is intense. The loss of any of our senior management, or our inability to attract, retain and motivate the additional or replacement highly-skilled employees and consultants that our business requires, could substantially hurt our business and prospects.

The regulatory approval process is expensive, time consuming, uncertain and may prevent us from obtaining required approvals for the commercialization of some of our products.

The FDA and other similar agencies in foreign countries have substantial requirements for therapeutic products. Such requirements often involve lengthy and detailed laboratory, clinical and post-clinical testing procedures and are expensive to complete. It often takes companies many years to satisfy these requirements, depending on the complexity and novelty of the product. The review process is also extensive, which may delay the approval process even more.

As of yet, we have not obtained any approvals to market our products. Further, we cannot assure you that the FDA or other regulatory agency will grant us approval for any of our products on a timely basis, if at all. Even if regulatory clearances are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems may result in restrictions on marketing or withdrawal of the product from the market.

Other risks

Our stock price may be volatile and our common stock could decline in value.

The market price of securities of life sciences companies in general has been very unpredictable. The range of sales prices of our common stock for the fiscal years ended December 31, 2012 and 2011, as quoted on the Over the

Counter Bulletin Board, was $0.02 to $0.11 and $0.05 to $0.19, respectively. The following factors, in addition to factors that affect that market generally, could significantly affect our business, and the market price of our common stock could decline:

- competitors announcing technological innovations or new commercial products;
- competitors' publicity regarding actual or potential products under development;
- regulatory developments in the United States and foreign countries;
- developments concerning proprietary rights, including patent litigation;
- public concern over the safety of therapeutic products; and
- changes in healthcare reimbursement policies and healthcare regulations.

There is a large number of shares of the Company's common stock that may be issued or sold, and if such shares are issued or sold, the market price of our common stock may decline.

As of December 31, 2012, we had 144,041,556 shares of our common stock outstanding.

If all warrants and options outstanding as of December 31, 2012 are exercised prior to their expiration, up to 12,357,884 additional shares of our common stock could become freely tradable. Such sales of substantial amounts of common stock in the public market could adversely affect the prevailing market price of our common stock and could also make it more difficult for us to raise funds through future offerings of common stock.

Since December 31, 2012, we have issued our Series G Preferred Stock, which is convertible into shares of our common stock (see Note 12 to our consolidated financial statements for the years ended December 31, 2012 and 2011—Subsequent Events—*Series G Preferred Stock Placement*) and may in the future issue additional equity or equity-based securities. If some or all of our Series G Preferred Stock converts to common stock, or if we issue additional equity or equity-based securities, the number of shares of our common stock outstanding could increase substantially, which could adversely affect the prevailing market price of our common stock and could also make it more difficult for us to raise funds through future offerings of common stock.

Our charter document may prevent or delay an attempt by our stockholders to replace or remove management.

Certain provisions of our restated certificate of incorporation, as amended, could make it more difficult for a third party to acquire control of our business, even if such change in control would be beneficial to our stockholders. Our restated certificate of incorporation, as amended, allowed the Board of Directors of the Company, referred to as the Board or Board of Directors, to issue as of December 31, 2012 up to 3,507,500 shares of preferred stock without stockholder approval. The ability of our Board of Directors to issue additional preferred stock may have the effect of delaying or preventing an attempt by our stockholders to replace or remove existing directors and management. While additional shares of our preferred stock have been authorized and issued in March and April 2014, the Company retains the authority to issue a substantial number of shares of preferred stock without stockholder approval.

If our common stock is determined to be a "penny stock," a broker-dealer may find it more difficult to trade our common stock and an investor may find it more difficult to acquire or dispose of our common stock in the secondary market.

In addition, our common stock may be subject to the so-called "penny stock" rules. The United States Securities and Exchange Commission ("SEC") has adopted regulations that define a "penny stock" to be any equity security that has a market price per share of less than $5.00, subject to certain exceptions, such as any securities listed on a national securities exchange. For any transaction involving a "penny stock," unless exempt, the rules impose additional sales practice requirements on broker-dealers, subject to certain exceptions. If our common stock is determined to be a "penny stock," a broker-dealer may find it more difficult to trade our common stock and an investor may find it more difficult to acquire or dispose of our common stock on the secondary market.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Through May 2012, we leased approximately 32,000 square feet of office, research laboratory and expansion space in Irvine, California. In May 2012, we entered into an operating lease regarding a 5,000 square-foot facility. The monthly rent on the 32,000 square-foot facility was approximately $47,000 and for the 5,000 square foot facility, $9,204 per month. In March 2013, the Company vacated its operating facility prior to the scheduled termination of its lease. Subsequently, the Company received notice that it was being sued in the Superior Court of California by its former landlord seeking among other things, past due rent and reasonable attorney fees. On May 23, 2013, a settlement was reached wherein the Company agreed to relinquish its security deposit in the amount of $29,545, transfer title to its remaining furniture, equipment and leasehold improvements, and pay an additional $26,000, which was timely paid in 2013.

Item 3. Legal Proceedings

We were not a party to any material legal proceedings, nor has any material proceeding been terminated during the fiscal year ended December 31, 2012.

Since December 31, 2012, we have been periodically subject to various pending and threatened legal actions and claims. See Note 11 to our consolidated financial statements for the years ended December 31, 2012 and 2011—Commitments and Contingencies—*Pending or Threatened Legal Actions and Claims* and Note 12 to our consolidated financial statements for the years ended December 31, 2012 and 2011—Subsequent Events—*Debt Settlements* for details regarding these matters.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Effective December 14, 2009, our common stock began quoting on the Over the Counter Bulletin Board, referred to as OTCBB, under the symbol "CORX.OB", which was subsequently changed to "CORX". Prior to that date, our common stock traded on the NYSE Amex (formerly, The American Stock Exchange) under the symbol "COR". The following table presents quarterly information on the high and low sales prices of the common stock furnished by the OTCBB for the fiscal years ended December 31, 2012 and 2011. The quotations on the OTCBB reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	High	Low
Fiscal Year ended December 31, 2012		
Fourth Quarter	$0.07	$0.02
Third Quarter	0.09	0.05
Second Quarter	0.11	0.04
First Quarter	0.11	0.05
Fiscal Year ended December 31, 2011		
Fourth Quarter	$0.10	$0.05
Third Quarter	0.11	0.05
Second Quarter	0.16	0.06
First Quarter	0.19	0.13

As of December 31, 2012, there were 404 stockholders of record of our common stock, and approximately 8,000 beneficial owners. The high and low sales prices for our common stock on December 31, 2012, as quoted on the OTCBB, were $0.0419 and $0.0260, respectively.

We have never paid cash dividends on our common stock and do not anticipate paying such dividends in the foreseeable future. The payment of dividends, if any, will be determined by the Board in light of conditions then existing, including our financial condition and requirements, future prospects, restrictions in financing agreements, business conditions and other factors deemed relevant by the Board.

During the fiscal year ended December 31, 2012, we did not repurchase any of our securities.

Item 6. Selected Financial Data

Not applicable to smaller reporting companies.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with the audited financial statements and notes related thereto appearing elsewhere herein.

Overview

The Company was formed in 1987 to engage in the discovery, development and commercialization of innovative pharmaceuticals for the treatment of neurological and psychiatric disorders. In 2011, prior management conducted a re-evaluation of the Company's strategic focus and determined that clinical development in the area of respiratory disorders, particularly respiratory depression and sleep apnea, provided the most cost-effective opportunities for potential rapid development and commercialization of the Company's compounds. Accordingly, the Company narrowed its clinical focus at that time and abandoned other avenues of scientific inquiry. This re-evaluation provided the impetus for the Company's acquisition of Pier Pharmaceuticals, Inc. ("Pier") in August 2012, as described below. Since new management's appointment in March 2013, new management has continued to implement this revised strategic focus, including seeking the capital to fund such efforts. As a result of the Company's scientific discoveries and the acquisition of strategic, exclusive license agreements (including a new license agreement with the University of Illinois), management believes that the Company is now a leader in the discovery and development of innovative pharmaceuticals for the treatment of respiratory disorders.

Since its formation in 1987, the Company has been engaged in the research and clinical development of a class of compounds referred to as ampakines. By acting as positive allosteric modulators of AMPA glutamate receptors, ampakines increase the excitatory effects of the neurotransmitter glutamate. Preclinical research suggested that these ampakines might have therapeutic potential for the treatment of certain respiratory disorders, as well as cognitive disorders, depression, attention deficit disorder and schizophrenia.

In its early stages, the Company entered into a series of license agreements in 1993 and 1998 with the University of California, Irvine ("UCI") that granted the Company proprietary rights to certain chemical compounds that acted as ampakines and their therapeutic uses. These agreements granted the Company, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the license agreement, that were then held by UCI; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the license agreements, subject to the provisions of the license agreements. The Company was required, among other terms and conditions, to pay UCI a license fee, royalties, patent costs and certain additional payments.

At December 31, 2012, the Company was not in compliance with its minimum annual payment obligations and believed that this default constituted a termination of the license agreements. On April 15, 2013, UCI notified the Company that these license agreements were terminated due to the Company's failure to make its obligatory payments. Since the patents covered in these license agreements had begun to expire and the therapeutic uses described in these patents were no longer germane to the Company's new focus on respiratory disorders, the loss of these license agreements is not expected to have a material impact on the Company's current or future drug development programs.

The Company also owns patents and patent applications for certain families of chemical compounds, including ampakines, which claim the chemical structures and their use in the treatment of various disorders. These patents cover, among other compounds, the Company's lead ampakines CX1739 and CX1942, and extend through at least 2028.

On May 8, 2007, the Company entered into a license agreement, as subsequently amended, with the University of Alberta granting the Company exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. These patents, along with the Company's own patents claiming chemical structures, comprise the Company's principal intellectual property supporting the Company's research and clinical development program in the use of ampakines for the treatment of respiratory disorders. The Company has completed pre-clinical studies indicating that several of its ampakines, including CX717, CX1739 and CX1942, were efficacious in treating drug induced respiratory depression caused by opiates or certain anesthetics without offsetting the analgesic effects of the opiates or the anesthetic effects of the anesthetics. In two clinical Phase 2 studies, one of which was published in a peer-reviewed journal, CX717, a predecessor compound to CX1739 and CX1942, antagonized the respiratory depression produced by fentanyl, a potent narcotic, without affecting the analgesia produced by this drug. In addition, the Company has conducted a Phase 2A clinical study in which patients with sleep apnea were administered CX1739, the Company's lead clinical compound. Preliminary results suggested that CX1739 might have use for the treatment of central and mixed sleep apnea, but not obstructive sleep apnea.

In order to expand the Company's respiratory disorders program, the Company acquired 100% of the issued and outstanding equity securities of Pier effective August 10, 2012 pursuant to an Agreement and Plan of Merger, as described below.

Loan from SY Corporation Co., Ltd.

On June 25, 2012, the Company borrowed 465,000,000 Won (the currency of South Korea, equivalent to approximately $400,000 US dollars) from and executed a secured note payable to SY Corporation Co., Ltd., formerly known as Samyang Optics Co. Ltd. ("Samyang"), an approximately 20% common shareholder in the Company at that time. The note accrues simple interest at the rate of 12% per annum and has a maturity date of June 25, 2013, although Samyang was permitted to demand early repayment of the promissory note on or after December 25, 2012. Samyang did not demand early repayment. The promissory note is currently due and payable.

Merger with Pier Pharmaceuticals, Inc.

The Company acquired 100% of the issued and outstanding equity securities of Pier effective August 10, 2012 pursuant to an Agreement and Plan of Merger. Pier was formed in June 2007 (under the name SteadySleep Rx Co.) as a clinical stage pharmaceutical company to develop a pharmacologic treatment for the respiratory disorder known as obstructive sleep apnea and had been engaged in research and clinical development activities since formation.

In connection with the merger transaction with Pier, the Company issued 58,417,893 newly issued shares of its common stock with an aggregate fair value of $3,271,402 ($0.056 per share), based upon the closing price of the Company's common stock on August 10, 2012. The shares of common stock were issued to stockholders, convertible note holders, warrant holders, option holders, and certain employees and vendors of Pier in satisfaction of their interests and claims. The common stock issued by the Company represented approximately 41% of the 144,041,556 common shares outstanding immediately following the closing of the transaction.

Through the merger, the Company gained access to an Exclusive License Agreement, as amended (the "License Agreement"), that Pier had entered into with the University of Illinois on October 10, 2007. The License Agreement covered certain patents and patent applications in the United States and other countries claiming the use of certain compounds referred to as cannabinoids, of which dronabinol is a specific example, for the treatment of sleep related breathing disorders (including sleep apnea). Dronabinol is a synthetic derivative of the naturally occurring substance in the cannabis plant, otherwise known as Δ9-THC (Δ9-tetrahydrocannabinol). Pier's business plan was to determine whether dronabinol would significantly improve subjective and objective clinical measures in patients with obstructive sleep apnea ("OSA"). In addition, Pier intended to evaluate the feasibility and comparative efficacy of a proprietary formulation of dronabinol.

The License Agreement granted Pier, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the License Agreement, that were then held by the University of Illinois; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed

products; and (iii) to grant sub-licenses of the rights granted in the License Agreement, subject to the provisions of the License Agreement. Pier was required under the License Agreement, among other terms and conditions, to pay the University of Illinois a license fee, royalties, patent costs and certain milestone payments.

Prior to the merger, Pier conducted a 21 day, randomized, double-blind, placebo-controlled dose escalation Phase 2 clinical study in 22 patients with obstructive sleep apnea, in which dronabinol produced a statistically significant reduction in the Apnea-Hypopnea Index ("AHI"), the primary therapeutic end-point, and was observed to be safe and well tolerated. Dronabinol is currently under investigation, at the University of Illinois and other centers, in a potentially pivotal 120 patient, double-blind, placebo-controlled Phase 2B OSA clinical trial, fully funded by the National Institutes of Health.

Dronabinol is a Schedule III, controlled generic drug with a relatively low abuse potential that is approved by the U.S. Food and Drug Administration ("FDA") for the treatment of AIDS-related anorexia and chemotherapy induced emesis. The use of dronabinol for the treatment of OSA is a novel indication for an already approved drug and, as such, the Company believes that it would only require approval by the FDA of a supplemental new drug application.

The Company accounted for the Pier transaction pursuant to ASC Topic 805, Business Combinations. The Company identified and evaluated the fair value of the assets acquired. Based on the particular facts and circumstances surrounding the history and status of Pier, including its business and intellectual property at the time of the merger transaction, the Company determined that the identifiable intangible assets were comprised solely of contract-based intangible assets, and that there was no measurable goodwill.

The intangible asset acquired in the Pier transaction consisted of the License Agreement. Unless terminated earlier, the License Agreement would terminate upon expiration or termination of all patent rights. The License Agreement defined patent rights as all of the University of Illinois' rights in the patents and patent applications, and (b) all of the University of Illinois' rights in all divisions, continuations, CIPs, reissues, renewals, re-examinations, foreign counterparts, substitutions or extensions thereof. Based upon the expiration date of the underlying patents, the License Agreement would be amortized on a straight-line basis over the remaining life of the underlying patents of 172 months from the date of acquisition.

The following table summarizes the fair value of the assets acquired and liabilities assumed by the Company at the closing of the Pier transaction on August 10, 2012.

Fair value of assets acquired:	
Cash	$23,208
Other current assets	698
Equipment	3,463
License agreement	3,411,157
Total assets acquired	$3,438,526
Consideration transferred by the Company:	
Fair value of common shares issued	$3,271,402
Liabilities assumed	167,124
Total consideration paid	$3,438,526

The License Agreement was terminated effective March 21, 2013 due to the Company's failure to make a required payment. New management subsequently opened negotiations with the University of Illinois, as a result of which the Company ultimately entered into a new license agreement with the University of Illinois on June 27, 2014 that is similar, but not identical, to the License Agreement that had been terminated on March 21, 2013.

Additional information with respect to the Pier transaction, including the impairment of the License Agreement that resulted in the Company recording an impairment charge to operations of $3,321,678 at December 31, 2012, is included in Notes 3 and 4 to the Company's consolidated financial statements for the years ended December 31, 2012 and 2011, which is included elsewhere in this document.

Significant Developments Subsequent to December 31, 2012

Changes in Officers and Directors

On March 22, 2013, the Company received a written consent of stockholders holding a majority of the Company's common stock signed by Origin Ventures II LP, Illinois Emerging Technologies Fund, LP, Illinois Ventures LLC, Samyang Optics Co. Ltd., Samyang Value Partners Co., Ltd., Steven Chizzik, Kenneth M. Cohen, Peter Letendre, David W. Carley and Aurora Capital LLC (the "Written Consent") (i) removing Charles J. Casamento, M. Ross Johnson, John F. Benedik and Mark A. Varney from their positions as directors of the Company, and (ii) appointing each of Arnold S. Lippa, Ph.D. and Jeff E. Margolis to fill two of the vacancies created, each to hold such office until the next annual meeting of the stockholders and until their successors have been duly elected and qualified. The Written Consent did not remove Moogak Hwang, Ph.D., a representative of Samyang Optics Co. Ltd., a lender to and significant stockholder of the Company, from the Board of Directors. Dr. Hwang continued to serve as a director until his resignation from the Board of Directors effective September 30, 2013.

Following the delivery of the Written Consent, the Board of Directors, acting by unanimous written consent dated March 22, 2013, removed all officers of the Company and appointed Dr. Lippa, as Chairman of the Board, President and Chief Executive Officer and Mr. Margolis, as Vice President, Treasurer and Secretary. On April 29, 2013, Robert N. Weingarten was appointed as a director, Vice President and Chief Financial Officer.

On September 3, 2014, James Sapirstein and Kathryn MacFarlane were appointed as new directors of the Company. These two new directors are considered to be independent directors. In connection with those appointments and in conformity with its corporate policy of indemnifying all directors and officers, the Board of Directors also agreed at that time to enter into indemnification agreements for all directors and officers of the Company, namely, each existing director of the Company, Arnold S. Lippa, Jeff E. Margolis, and Robert N. Weingarten, each of whom is also an officer of the Company, and with the two new directors. Pursuant to the indemnity agreements, the Company will indemnify each director or officer when such individual is a party or threatened to become a party, by virtue of being a director or officer of the Company, from the costs and expenses, fines and certain other amounts in connection with certain proceedings, including proceedings in the right of the Company, so long as such director or officer acted in good faith and reasonably believed that such actions were not opposed to the best interests of the Company.

Working Capital Advances

On June 25, 2013, the Arnold Lippa Family Trust, an affiliate of Dr. Lippa, the Company's Chairman and Chief Executive Officer, began advancing funds to the Company in order to meet minimum operating needs. Such advances reached a maximum of $150,000 on March 3, 2014 and were due on demand with interest at a rate per annum equal to the "Blended Annual Rate", as published by the U.S. Internal Revenue Service, approximately 0.22% for period outstanding. In March 2014, the Company repaid the working capital advances, including accrued interest of $102, with the proceeds from the private placement of its Series G Preferred Stock described below.

Series G Preferred Stock Placement

On March 14, 2014, the Company filed a Certificate of Designation, Preferences, Rights and Limitations, (the "Certificate of Designation") of its Series G Preferred Stock ("Series G Preferred Stock") with the Secretary of State of the State of Delaware to amend the Company's certificate of incorporation. The number of shares designated as Series G Preferred Stock is 1,700 (which shall not be subject to increase without the written consent of a majority of the holders of the Series G Preferred Stock or as otherwise set forth in the Certificate of Designation). The initial Stated Value of each share of Series G Preferred Stock is $1,000.

The Company shall pay a stated dividend on the Series G Preferred Stock at a rate per share (as a percentage of the Stated Value per share) of 1.5% per annum, payable quarterly within 15 calendar days of the end of each fiscal quarter of the Company, in duly authorized, validly issued, fully paid and non-assessable shares of Series G Preferred Stock, which may include fractional shares of Series G Preferred Stock.

The Series G Preferred Stock shall be convertible, beginning 60 days after the last share of Series G Preferred Stock is issued in the Private Placement, at the option of the holder, into common stock at the applicable conversion price, at a

rate determined by dividing the Stated Value of the shares of Series G Preferred Stock to be converted by the conversion price, subject to adjustments for stock dividends, splits, combinations and similar events as described in the form of Certificate of Designation. The stated value of the Series G Preferred Stock is $1,000 per share, and the initial conversion price is $0.0033. Accordingly, at the option of the holder, each share of Series G Preferred Stock is convertible commencing on the date that is 60 calendar days after the date on which the last share of Series G Preferred Stock is issued pursuant to a Purchase Agreement, into 303,030.3 shares of common stock. In addition, the Company has the right to require the holders of the Series G Preferred Stock to convert such shares into common stock under certain enumerated circumstances set forth in the Certificate of Designation.

Upon either (i) a Qualified Public Offering (as defined in the Certificate of Designation) or (ii) the affirmative vote of the holders of a majority of the Stated Value of the Series G Preferred Stock issued and outstanding, all outstanding shares of Series G Preferred Stock, plus all accrued or declared, but unpaid, dividends thereon, shall mandatorily be converted into such number of shares of common stock determined by dividing the Stated Value of such Series G Preferred Stock (together with the amount of any accrued or declared, but unpaid, dividends thereon) by the Conversion Price (as defined in the Certificate of Designation) then in effect. If not earlier converted, the Series G Preferred Stock shall be redeemed by conversion on the two year anniversary of the date the last share of Series G Preferred Stock is issued in the Private Placement at the then applicable Conversion Price.

Except as described in the Certificate of Designation, holders of the Series G Preferred Stock will vote together with holders of the Company common stock on all matters, on an as-converted to common stock basis, and not as a separate class or series (subject to limited exceptions).

In the event of any liquidation or winding up of the Company prior to and in preference to any Junior Securities (including common stock), the holders of the Series G Preferred Stock will be entitled to receive in preference to the holders of the Company common stock a per share amount equal to the Stated Value, plus any accrued and unpaid dividends thereon.

On March 18, 2014, the Company entered into Securities Purchase Agreements with various accredited investors (the "Initial Purchasers"), pursuant to which the Company sold an aggregate of 753.22 shares of its Series G Preferred Stock for a purchase price of $1,000 per share, or an aggregate purchase price of $753,220. This financing represents the initial closing on a private placement of up to $1,500,000 (the "Private Placement"). The Initial Purchasers in this tranche of the Private Placement consisted of (i) Arnold S. Lippa, the Company's Chairman, Chief Executive Officer and a member of the Company's Board of Directors, who had not previously owned common stock in the Company and who invested $250,000, and (ii) new, non-affiliated, accredited investors. Neither the Series G Preferred Stock nor the underlying shares of common stock have any registration rights.

The placement agents and selected dealers in connection with the initial tranche of the Private Placement received cash fees totaling $3,955 as compensation and warrants totaling approximately 5.6365% of the shares of common stock into which the Series G Preferred Stock may convert, exercisable for five years at a price that is 120% of the conversion price at which the Series G Preferred Stock may convert into the Company's common stock. Aurora Capital LLC was one of the placement agents.

On April 17, 2014, the Company entered into Securities Purchase Agreements with various accredited investors (together with the Initial Purchasers, the "Purchasers"), pursuant to which the Company sold an aggregate of 175.28 shares of its Series G Preferred Stock, for a purchase price of $1,000 per share, or an aggregate purchase price of $175,280. This was the second and final closing on the Private Placement. The Purchasers in the second and final tranche of the Private Placement consisted of new, non-affiliated, accredited investors and non-management investors who had also invested in the first closing. Neither the Series G Preferred Stock nor the underlying shares of common stock have any registration rights.

The placement agents and selected dealers in connection with the second tranche of the Private Placement received cash fees of $3,465 as compensation and warrants totaling approximately 12% of the shares of common stock into which the Series G Preferred Stock may convert, exercisable for five years at a price that is 120% of the conversion price at which the Series G Preferred Stock may convert into the Company's common stock. Aurora Capital LLC was one of the placement agents.

The stated value of the Series G Preferred Stock is $1,000 per share, and the initial conversion price is $0.0033. Accordingly, at the option of the holder, each share of Series G Preferred Stock is convertible commencing on the date that is sixty calendar days after the date on which the last share of Series G Preferred Stock is issued pursuant to a Purchase Agreement, into 303,030.3 shares of common stock. The aggregate of 928.5 shares of Series G Preferred Stock sold in the Private Placement are convertible into a total of 281,363,634 shares of common stock. The Company had 144,041,556 shares of common stock, plus an additional 57,000,000 shares of common stock issued to management on April 14, 2014, issued and outstanding immediately prior to the closing of the Private Placement of Series G Preferred Stock described herein.

The warrants that the placement agents and selected dealers received in connection with the Private Placement represent the right to acquire 19,251,271 shares of common stock exercisable for five years at a price that is 120% of the conversion price at which the Series G Preferred Stock may convert into the Company’s common stock.

Purchasers in the Private Placement of the Series G Preferred Stock have executed written consents in favor of (i) approving and adopting an amendment to the Company's certificate of incorporation that increases the number of authorized shares of the Company to 1,405,000,000, 1,400,000,000 of which are shares of common stock and 5,000,000 of which are shares of preferred stock, and (ii) approving and adopting the Cortex Pharmaceuticals, Inc. 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan.

The shares of Series G Preferred Stock were offered and sold without registration under the Securities Act of 1933, as amended, in reliance on the exemptions provided by Section 4(a)(2) of the Securities Act as provided in Rule 506(b) of Regulation D promulgated thereunder. The shares of Series G Preferred Stock and the Company's common stock issuable upon conversion of the shares of Series G Preferred Stock have not been registered under the Securities Act or any other applicable securities laws, and unless so registered, may not be offered or sold in the United States except pursuant to an exemption from the registration requirements of the Securities Act.

Capitalized terms in this section that are not otherwise defined have the meanings ascribed to them in the Stock Purchase Agreements, the form of which was previously filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 24, 2014.

Debt Settlements

During the three months ended March 31, 2014, the Company executed settlement agreements with four former executives that resulted in the settlement of potential claims totaling approximately $1,336,000 for a total of approximately $118,000 in cash, plus the issuance of options to purchase 4,300,000 shares of common stock exercisable at $0.04 per share for periods ranging from five to ten years. In addition to other provisions, the settlement agreements included mutual releases.

During the three months ended June 30, 2014, the Company also executed settlement agreements with certain former service providers that resulted in the settlement of potential claims totaling approximately $591,000 for a cost of approximately $155,000 in cash, plus the issuance of options to purchase 1,250,000 shares of common stock exercisable at $0.04 per share for a period of five years. In addition to other provisions, the settlement agreements included mutual releases.

The aforementioned agreements resulted in the settlement of potential claims totaling approximately $1,927,000 for a cost of approximately $273,000 in cash, plus the issuance of options to purchase 5,550,000 shares of common stock exercisable at $0.04 per share for periods ranging from five to ten years. The Company continues to explore ways to reduce its indebtedness, and might in the future enter additional settlements of potential claims, including, without limitation, those by other former executives or third party creditors.

University of Illinois 2014 Exclusive License Agreement

On June 27, 2014, the Company entered into an Exclusive License Agreement (the "2014 License Agreement") with the University of Illinois that was similar, but not identical, to the License Agreement between the parties that had been previously terminated on March 21, 2013. The 2014 License Agreement became effective on September 18, 2014, upon the completion of certain conditions set forth in the 2014 License Agreement, including (i) the payment by the Company of a $25,000 licensing fee, (ii) the payment by the Company of certain outstanding patent costs (not to exceed $16,000), and (iii) the assignment to the University of Illinois of certain rights the Company holds in certain patent applications. In exchange for certain milestone and royalty payments, the 2014 License Agreement granted the Company (i) exclusive rights to several issued and pending patents in numerous jurisdictions and (ii) the non-exclusive right to certain technical information that is generated by the University of Illinois in connection with certain clinical trials as specified in the 2014 License Agreement, all of which relate to the use of cannabinoids for the treatment of sleep related breathing disorders. The Company is developing dronabinol (Δ9-tetrahydrocannabinol), a cannabinoid, for the treatment of OSA, the most common form of sleep apnea.

Settlement with the Institute for the Study of Aging

On September 2, 2014, the Company entered into a Release Agreement (the "Release Agreement") with the Institute for the Study of Aging (the "Institute") to settle an outstanding promissory note, dated May 30, 2000, issued by the Company in favor of the Institute for an initial principal amount of $247,300 (the "Note"), which was made pursuant to an Agreement to Accept Conditions of Loan Support, also dated May 30, 2000 (the "Loan Support Agreement"). At August 31, 2014, the amount owed under the Note, including accrued interest was approximately $337,000. Pursuant to the terms of the Release Agreement, the Institute received 1,000,000 restricted shares of the Company's common stock as settlement of all obligations of the Company under the Note and the Loan Support Agreement. Such common shares are "restricted securities" as defined under Rule 144 promulgated under the Securities Act of 1933, as amended, and are not subject to any registration rights. The Release Agreement also includes a mutual release between the Company and the Institute, releasing each party from all claims up until the date of the Release Agreement.

Going Concern

The Company's consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has incurred net losses of $7,572,244 and $2,255,320 for the fiscal years ended December 31, 2012 and 2011, respectively, negative operating cash flows of $1,861,870 and $1,935,811 for the fiscal years ended December 31, 2012 and 2011, respectively, and incurred additional net losses and negative operating cash flows in the 2013 and 2014 fiscal years. The Company expects to continue to incur net losses and negative operating cash flows for several more years thereafter. As a result, management and the Company's auditors believe that there is substantial doubt about the Company's ability to continue as a going concern.

The Company is currently, and has for some time, been in significant financial distress. It has limited cash resources and current assets and has no ongoing source of revenue. Since late 2012, the Company's business activities have been reduced to minimal levels, and the prior management of the Company, which was removed by an action of stockholders on March 22, 2013, had retained bankruptcy counsel to assist it in preparations to file for liquidation under Chapter 7 of the United States Bankruptcy Code. New management, which was appointed during March and April 2013, has evaluated the status of numerous aspects of the Company's existing business and obligations, including, without limitation, debt obligations, financial requirements, intellectual property, licensing agreements, legal and patent matters and regulatory compliance, and has raised new capital to fund its business activities.

From June 2013 through March 2014, the Company's Chairman and Chief Executive Officer advanced short-term loans to the Company aggregating $150,000 in order to meet its minimum operating needs. In March and April 2014, the Company completed a private placement by selling 928.5 shares of its Series G Preferred Stock for gross proceeds of $928,500 and repaid the aggregate advances. The Company's Chairman and Chief Executive Officer invested $250,000 in the Series G Preferred Stock private placement. Subsequent to the closing of this private placement, the

Company has continued efforts to raise additional operating capital through various means to fund its operating activities and debt obligations.

The Company will not be able to pay its liabilities and fund its business activities going forward without raising additional capital. As a result of the Company's current financial situation, the Company has limited access to external sources of debt and equity financing. Accordingly, there can be no assurances that the Company will be able to secure additional financing in the amounts necessary to fully fund its operating and debt service requirements. If the Company is unable to access sufficient cash resources, the Company may be forced to discontinue its operations entirely and liquidate.

Recent Accounting Pronouncements

In December 2011, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2011-11, Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities. ASU 2011-11 requires an entity to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position. The new guidance will be applied retrospectively and is effective for annual and interim reporting periods beginning on or after January 1, 2013. The Company does not expect adoption of this new guidance to have any impact on its consolidated financial statement presentation or disclosures.

In July 2012, the FASB issued ASU No. 2012-02, Intangibles - Goodwill and Other (Topic 350): Testing Indefinite-Lived Intangible Assets for Impairment. ASU 2012-02 allows entities the option to first assess qualitative factors to determine whether it is necessary to perform the quantitative impairment test. If the qualitative assessment indicates that it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no testing is required. The new guidance is effective for the Company in the period beginning January 1, 2013. The Company does not expect the adoption of this new guidance to have any impact on its consolidated financial statement presentation or disclosures.

In April 2014, the FASB issued ASU No. 2014-08, Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360). ASU 2014-08 amends the requirements for reporting discontinued operations and requires additional disclosures about discontinued operations. Under ASU 2014-08, only disposals representing a strategic shift in operations or that have a major effect on the Company’s operations and financial results should be presented as discontinued operations. This new guidance is effective for annual periods beginning after December 15, 2014. As the Company is engaged in research and development activities and the Company’s planned principal operations have not yet commenced, the Company does not expect the adoption of this new guidance to have any impact on the Company’s consolidated financial statement presentation or disclosures.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current U.S. GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. ASU 2014-09 also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The new guidance is effective for reporting periods beginning after December 15, 2016, and early adoption is not permitted. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. As the Company does not expect to have any operating revenues for the foreseeable future, the Company does not expect the adoption of this new guidance to have any impact on the Company’s consolidated financial statement presentation or disclosures.

Management does not believe that any other recently issued, but not yet effective, authoritative guidance, if currently adopted, would have a material impact on the Company’s financial statement presentation or disclosures.

Concentration of Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and short-term investments. The Company limits its exposure to credit risk by investing its cash with high credit quality financial institutions

Critical Accounting Policies and Estimates

The Company prepared its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Management periodically evaluates the estimates and judgments made. Management bases its estimates and judgments on historical experience and on various factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates as a result of different assumptions or conditions.

The following critical accounting policies affect the more significant judgments and estimates used in the preparation of the Company's consolidated financial statements.

License Agreement

The License Agreement with the University of Illinois acquired in the Pier transaction was an acquired intangible asset recorded at cost of $3,411,157 (based on the fair value ascribed to the License Agreement in August 2012) and was being amortized on a straight-line basis over the remaining life of its underlying patents of 172 months from the date of acquisition.

Due to the Company's inability to make a required payment under the License Agreement of $75,000 at December 31, 2012, the Company determined that the carrying value of the License Agreement was impaired at such date. Accordingly, the Company recorded an impairment charge to operations of $3,321,678 at December 31, 2012 to write-off the License Agreement.

Revenue Recognition

The Company recognizes revenue when all four of the following criteria are met: (i) pervasive evidence that an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the amounts earned can be readily determined; and (iv) collectability of the amounts earned is reasonably assured. Amounts received for upfront technology license fees under multiple-element arrangements are deferred and recognized over the period of committed services or performance, if such arrangements require the Company's on-going services or performance.

The Company records research grant revenues when the expenses related to the grant projects are incurred. Amounts received under research grants are nonrefundable, regardless of the success of the underlying research, to the extent that such amounts are expended in accordance with the approved grant project.

Employee Stock Options and Stock-Based Compensation

All share-based payments to employees, including grants of employee stock options, are recognized in the financial statements based on their fair values.

Stock options and warrants issued to non-employees as compensation for services to be provided to the Company are accounted for based upon the fair value of the services provided or the estimated fair value of the option or warrant, whichever can be more clearly determined. The Company recognizes this expense over the period in which the

services are provided. Management utilizes the Black-Scholes option-pricing model to determine the fair value of the stock options and warrants issued by the Company. This model contains significant inputs that are subject to estimation by management.

Results of Operations

Years Ended December 31, 2012 and 2011

Revenues. Revenues for the year ended December 31, 2012 of $48,309 consisted of grant revenues awarded by the Michael J. Fox Foundation for research on Parkinson's Disease.

Revenues for the year ended December 31, 2011 consisted of $3,000,000 in licensing fees received from Les Laboratoires Servier ("Servier") pursuant to an option agreement for Servier to expand its rights to the high impact ampakine compound, CX1632 (S47778) and grant revenues of $114,605 awarded by the Michael J. Fox Foundation for research on Parkinson's Disease.

General and Administrative. For the year ended December 31, 2012, general and administrative expenses were $1,946,597, a decrease of $1,242,580 or approximately 39%, as compared to $3,189,177 for the year ended December 31, 2011. The decrease in general and administrative expenses for the year ended December 31, 2012, as compared to the year ended December 31, 2011, reflects the Company's efforts to reduce facility and personnel costs beginning in May 2012.

Through May 31, 2012, the Company leased approximately 32,000 square feet of research laboratory, office and expansion space. Effective June 1, 2012, the Company entered into a new operating lease agreement for approximately 5,000 square feet. Additionally, on June 15, 2012, each of the Company's executive officers at that time agreed to defer 50% of their base salary, effective June 1, 2012, until the Company secured sufficient capital or certain corporate transactions occurred, in an effort to preserve the Company's financial resources.

For the years ended December 31, 2012 and 2011, stock-based compensation costs included in general and administrative expenses were $170,805 and $130,720, respectively.

Research and Development. For the year ended December 31, 2012, research and development expenses were $826,702, a decrease of $1,360,993 or approximately 62%, as compared to $2,187,695 for the year ended December 31, 2011. The decrease in research and development expenses for the year ended December 31, 2012, as compared to the year ended December 31, 2011, reflects the Company's efforts to reduce facility, personnel costs, outside experts and consultants beginning in May 2012.

Through May 31, 2012, the Company leased approximately 32,000 square feet of research laboratory, office and expansion space. Effective June 1, 2012, the Company executed a new operating lease agreement for approximately 5,000 square feet. Additionally, on June 15, 2012, each of the Company's executive officers at that time agreed to defer 50% of their base salary, effective June 1, 2012, until the Company secured sufficient capital or certain corporate transactions occurred, in an effort to preserve the Company's financial resources.

Research and development expenses for the year ended December 31, 2011 include $200,000 paid to reacquire the ampakine rights and compounds from Biovail Laboratories International SRL ("Biovail") in March 2011, along with sublicensing fees of $53,000 related to a June 2011 transaction with Servier.

For the years ended December 31, 2012 and 2011, stock-based compensation costs (credit) included in research and development expenses were $8,513 and $(80,558), respectively.

Pier Merger-Related Costs. During the year ended December 31, 2012, the Company incurred merger costs of $1,246,107 in connection with its acquisition of Pier, including severance payments of $429,231 and the fair value of stock options to purchase 5,166,668 shares of the Company's common stock totaling $310,000 granted to two individuals whose employment was terminated pursuant to the terms of the merger agreement. Merger costs also include $506,876 in legal and other merger related fees, including $250,000 to the Company's investment banker.

Impairment Loss from Termination of License Agreement. The Company performed an impairment assessment of the carrying value of the License Agreement as of December 31, 2012 and determined that it had no future value at such date. Accordingly, the Company recorded an impairment charge to operations of $3,321,678 at December 31, 2012 to write off the License Agreement.

Loss on Settlement of Office Lease. In March 2013, the Company vacated its operating facility prior to the scheduled termination of its lease. Subsequently, the Company received notice that it was being sued in the Superior Court of California by its former landlord seeking among other things, past due rent and reasonable attorney fees. On May 23, 2013, a settlement was reached wherein the Company agreed to relinquish its security deposit in the amount of $29,545, transfer title to its remaining furniture, equipment and leasehold improvements, and to pay an additional $26,000, which was timely paid in 2013. The transfer of the Company's furniture, equipment and leasehold

improvements resulted in a loss of $39,126, which, because the Company had substantially abandoned these assets prior to December 31, 2012, was charged to operations at December 31, 2012.

Interest Income. Interest income was $92 for the year ended December 31, 2012, as compared to $1,856 for the year ended December 31, 2011.

Interest Expense. During the year ended December 31, 2012, interest expense was $196,984 (including $169,258 to Samyang, a related party), an increase of $192,965, as compared to $4,019 for the year ended December 31, 2011. The increase consisted primarily of accrued interest of $25,339 and the amortization of discount of $143,919 on the Company's note payable to Samyang, which was funded on June 25, 2012.

Foreign Currency Transaction Loss. Foreign currency transaction loss was $40,278 for the year ended December 31, 2012, reflecting the $399,774 loan from Samyang in June 2012 being denominated in the South Korean currency. There was no foreign currency transaction gain or loss for the year ended December 31, 2011.

Gain (Loss) on Sale of Assets. The Company incurred a loss on sale of assets of $3,173 for the year ended December 31, 2012, as compared to incurring a gain on sale of assets of $9,110 for the year ended December 31, 2011.

Net Loss. For the year ended December 31, 2012, the Company incurred a net loss of $7,572,244, as compared to a net loss of $2,255,320 for the year ended December 31, 2011.

Liquidity and Capital Resources – December 31, 2012

The Company's consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has incurred net losses of $7,572,244 and $2,255,320, respectively, for the fiscal years ended December 31, 2012 and 2011, respectively, negative operating cash flows of $1,861,870 and $1,935,811 for the fiscal years ended December 31, 2012 and 2011, respectively, and incurred additional net losses and negative operating cash flows in the 2013 and 2014 fiscal years. The Company expects to continue to incur net losses and negative operating cash flows for several more years thereafter. As a result, management and the Company's auditors believe that there is substantial doubt about the Company's ability to continue as a going concern.

At December 31, 2012, the Company had a working capital deficit of $2,991,695, as compared to working capital surplus of $600,139 at December 31, 2011, a decrease in working capital of $3,591,834 for the year ended December 31, 2012. At December 31, 2012, the Company had cash and money market funds aggregating $152,179, as compared to $1,610,945 at December 31, 2011, a decrease of $1,458,766 for the year ended December 31, 2012. The decrease in working capital and cash during the year ended December 31, 2012 was the result of cash utilized by the Company to fund its operating activities and to fund the costs associated with the acquisition of Pier.

The Company is currently, and has for some time, been in significant financial distress. It has limited cash resources and current assets and has no ongoing source of revenue. Since late 2012, the Company's business activities have been reduced to minimal levels, and the prior management of the Company, which was removed by the written consent of stockholders holding a majority of the outstanding shares on March 22, 2013, had retained bankruptcy counsel to assist it in preparations to file for liquidation under Chapter 7 of the United States Bankruptcy Code. New management, which was appointed during March and April 2013, has evaluated the status of numerous aspects of the Company's existing business and obligations, including, without limitation, debt obligations, financial requirements, intellectual property, licensing agreements, legal and patent matters and regulatory compliance, and has raised new capital to funds its business activities.

From June 2013 through March 2014, the Company's Chairman and Chief Executive Officer advanced short-term loans to the Company aggregating $150,000 in order to meet its minimum operating needs. In March and April 2014,

the Company completed a private placement by selling 928.5 shares of its Series G Preferred Stock for gross proceeds of $928,500 and repaid the aggregate advances. The Company's Chairman and Chief Executive Officer invested $250,000 in the Series G Preferred Stock private placement. Subsequent to the closing of this private placement, the Company has continued efforts to raise additional operating capital through various means to fund its operating activities and debt obligations.

The Company will not be able to pay its liabilities and fund its business activities going forward without raising additional capital. As a result of the Company's current financial situation, the Company has limited access to external sources of debt and equity financing. Accordingly, there can be no assurances that the Company will be able to secure additional financing in the amounts necessary to fully fund its operating and debt service requirements. If the Company is unable to access sufficient cash resources, the Company may be forced to discontinue its operations entirely and liquidate.

Operating Activities. For the year ended December 31, 2012, operating activities utilized cash of $1,861,870, as compared to utilizing cash of $1,935,811 for the year ended December 31, 2011, to support the Company's ongoing operations, including research and development activities, and to pay certain Pier merger-related costs.

Investing Activities. For the year ended December 31, 2012, investing activities generated cash of $24,700, consisting primarily of $23,208 received in connection with the Pier merger. For the year ended December 31, 2011, investing activities generated cash of $2,031,405, consisting primarily of $1,990,000 from the sales and maturities of marketable securities.

Financing Activities. For the year ended December 31, 2012, financing activities generated cash of $378,404, consisting of the proceeds from the note payable issued to Samyang in June 2012 of $399,774, partially offset by related financing costs of $21,370. For the year ended December 31, 2011, financing activities generated cash of $477,802, consisting of net proceeds from the sale of the Company's common stock and warrants to purchase common stock.

On June 25, 2012, the Company borrowed 465,000,000 Won (the currency of South Korea, equivalent to approximately $400,000 US dollars) from and executed a secured note payable to Samyang , an approximately 20% common shareholder in the Company at that time. The note accrues simple interest at the rate of 12% per annum and has a maturity date of June 25, 2013, although Samyang was permitted to demand early repayment of the promissory note on or after December 25, 2012. Samyang did not demand early repayment. The promissory note is currently due and payable.

Principal Commitments

Lease Commitment

On May 14, 2012, the Company executed a three-year lease for office space beginning June 1, 2012 at a monthly rate of $9,204. In March 2013, the Company vacated its operating facilities prior to the scheduled termination of the lease. In May 2013, a settlement with the landlord was reached and the lease was terminated.

University of California, Irvine License Agreements

The Company entered into a series of license agreements in 1993 and 1998 with the University of California, Irvine ("UCI") that granted the Company proprietary rights to certain chemical compounds that acted as ampakines and their therapeutic uses. These agreements granted the Company, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the license agreement, that were then held by UCI; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the license agreements, subject to the provisions of the

license agreements. The Company was required, among other terms and conditions, to pay UCI a license fee, royalties, patent costs and certain additional payments.

Under such license agreements, the Company was required to make minimum annual royalty payments of approximately $70,000. The Company was also required to spend a minimum of $250,000 per year to advance the ampakine compounds until the Company began to market an ampakine compound. The commercialization provisions in the agreements with UCI required the Company to file for regulatory approval of an ampakine compound before October 2012. In March 2011, UCI agreed to extend the required date for filing regulatory approval of an ampakine compound to October 2015. At December 31, 2012, the Company was not in compliance with its minimum annual payment obligations and believed that this default constituted a termination of the license agreements.

On April 15, 2013, the Company received a letter from UCI indicating that the license agreements between UCI and the Company had been terminated due to the Company’s failure to make certain payments required to maintain the agreements. Since the patents covered in these license agreements had begun to expire and the therapeutic uses described in these patents were no longer germane to the Company’s new focus on respiratory disorders, the loss of these license agreements is not expected to have a material impact on the Company’s current drug development programs. In the opinion of management, the Company has made adequate provision for any liability relating to this matter in its financial statements at December 31, 2012.

University of Alberta License Agreement

On May 8, 2007, the Company entered into a license agreement, as amended, with the University of Alberta granting the Company exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. The Company agreed to pay the University of Alberta a licensing fee and a patent issuance fee, which were paid, and prospective payments consisting of a royalty on net sales, sublicense fee payments, maintenance payments and milestone payments. The prospective maintenance payments commence on the enrollment of the first patient into the first Phase 2B clinical trial and increase upon the successful completion of the Phase 2B clinical trial. As the Company does not at this time anticipate scheduling a Phase 2B clinical trial, no maintenance payments are currently due and payable to the University of Alberta. In addition, no other prospective payments are currently due and payable to the University of Alberta.

Off-Balance Sheet Arrangements

At December 31, 2012, the Company did not have any transactions, obligations or relationships that could be considered off-balance sheet arrangements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable for smaller reporting companies.

Item 8. Financial Statements and Supplementary Data

Our financial statements and other information required by this item are set forth herein in a separate section beginning with the Index to Consolidated Financial Statements on page F-1.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in the reports that we file with the SEC under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, to allow for timely decisions regarding required disclosures.

As required by SEC Rule 15d-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer who were appointed to their positions in March and April 2013, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the most recent fiscal year covered by this report. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were not effective to ensure the information required to be disclosed in our reports filed or submitted to the SEC under the Exchange Act was timely recorded, processed and reported within the time periods specified in the SEC's rules and forms. In particular, the Company failed to complete and file its September 30, 2012 Quarterly Report on Form 10-Q and its December 31, 2012 Annual Report on Form 10-K in a timely manner because the Company's accounting and financial staff had resigned by October 26, 2012 and its financial and accounting systems had been shut-down at December 31, 2012.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to ensure that material information regarding our operations is made available to management and the board of directors to provide them reasonable assurance that the published financial statements are fairly presented. There are limitations inherent in any internal control, such as the possibility of human error and the circumvention or overriding of controls. As a result, even effective internal controls can provide only reasonable assurance with respect to financial statement preparation. As conditions change over time so too may the effectiveness of internal controls.

Our management, consisting of our Chief Executive Officer and our Chief Financial Officer, has evaluated our internal control over financial reporting as of December 31, 2012 based on the framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission. Based on this assessment, our management has concluded that material weaknesses in the Company's internal control over financial reporting existed as of December 31, 2012 as a result of a lack of personnel and non-functioning accounting systems. As a result of these material weaknesses, our internal control over financial reporting was not effective at such date.

Prior management, which had shut-down the Company and was preparing to cause it to file for liquidation under Chapter 7 of the United States Bankruptcy Code, was replaced on March 22, 2013 in conjunction with the change in control of the Board of Directors on such date. Since that date, new management has instituted a program to reestablish the Company's accounting and financial staff and install new accounting and internal control systems.

This annual report does not include an attestation report of the Company's independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's independent registered public accounting firm pursuant to rules of the SEC that permit the Company to provide only management's report in this annual report.

Changes in Internal Control over Financial Reporting

As described above, there were changes in our internal control over financial reporting during the fourth quarter of 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

In response to such changes, new management has retained accounting personnel, established accounting and internal control systems, addressed the preparation of delinquent SEC financial filings, and has been diligently working to bring delinquent SEC filings current as promptly as reasonably possible under the circumstances. However, as of the date of the filing of this Annual Report on Form 10-K, the Company had not completed the process to reestablish adequate internal controls over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Directors

The names of each of the directors and certain biographical information about them are set forth below:

Name	Age	Director Since	Principal Occupation
John F. Benedik [2][3]	64	2005	Retired Senior Partner, Arthur Andersen LLP
Charles J. Casamento [1][2]	66	1997	Principal and Executive Director, The Sage Group, Inc.
M. Ross Johnson, Ph.D. [1][2][3][4]	67	2002	President and Chief Executive Officer, Parion Sciences, Inc.
Mark A. Varney, Ph.D. [4]	45	2007	President and Chief Executive Officer of the Company

(1) Member of Compensation Committee

(2) Member of Audit Committee

(3) Member of Governance and Nominations Committee

(4) Member of Research and Development Committee

John F. Benedik was appointed to our Board in December 2005. From 1970 to May 2003, Mr. Benedik worked at Arthur Andersen LLP, where he was admitted to the firm's partnership in 1980. During his tenure with Arthur Andersen LLP, Mr. Benedik held a number of positions, including Division Head for the Consumer Products and Services audit division of the New York area offices from 1994 to 1998, Managing Partner of the New Jersey office from 1999 to 2002 and Practice Director of the New York area offices from 1998 to 2002. From September 2002 to May 2003, Mr. Benedik was a Managing Director of Arthur Andersen LLP. Mr. Benedik served on the board of directors and the audit committee of the board of Aeroflex Incorporated, a global provider of high technology solutions to aerospace, defense, cellular and broadband communications markets, from June 2004 until it was acquired in August 2007 by Veritas Capital in a transaction valued at approximately $1.1 billion. Mr. Benedik, a retired Certified Public Accountant in New York and New Jersey, received a B.A. in English from Fordham College and an M.B.A from the Columbia University Graduate School of Business with a concentration in accounting.

We believe that Mr. Benedik's qualifications to serve on our Board include his more than 30-years of experience working as a certified public accountant in the audit division at Arthur Andersen LLP, and his experience as a Managing Director of Arthur Andersen LLP. His experience and insights also help the Company assess risk management and overall financial risks. Mr. Benedik's financial expertise has proven invaluable to the Company, as of December 31, 2012, he served as the Chairman of our Audit Committee and a member of our Governance and Nominations Committee.

Charles J. Casamento has served as a director of the Company since July 1997 and as Chairman of the Board since August 2012. Since May 2007, Mr. Casamento has been a Principal and Executive Director of The Sage Group, Inc., a provider of strategic and transactional assistance to healthcare companies in the pharmaceutical, diagnostic, medical device, biotechnology and life science fields. From October 2004 to April 2007, Mr. Casamento was President, Chief Executive Officer and a member of the board of directors of Osteologix, Inc. a publicly held pharmaceutical company that develops products for potential use in treating osteoporosis. From 1999 to August 2004, Mr. Casamento served as Chairman of the board of directors, President and Chief Executive Officer of Questcor Pharmaceuticals, Inc., a publicly held biopharmaceutical company. Mr. Casamento formerly served as RiboGene, Inc.'s Chairman of the board of directors, President and Chief Executive Officer from 1993 through 1999 until it merged with Cypros to form Questcor. He was co-founder, President and Chief Executive Officer of Interneuron Pharmaceuticals, a biopharmaceutical company, from March 1989 until May 1993. Prior to that, Mr. Casamento has held senior management positions at a number of companies, including Senior Vice President and General Manager of Genzyme; Vice President, Business Development and Strategic Planning for the Critical Care Division of American Hospital Supply; and finance, marketing and business development positions with Johnson & Johnson, Hoffman-LaRoche, Inc. and Sandoz Inc. As of December 31, 2012, Mr. Casamento served on the board of directors and as Chairman of the audit committee of Astex Pharmaceuticals, Inc., a publicly held pharmaceutical company, and he served on the board of directors and as a member of the governance committee and compensation committee of International Stem Cell Corporation, a publicly held developer of stem cell technology. As of December 31, 2012, Mr. Casamento also served on the board of directors and is a member of the audit committee and governance committee and as Chairman of the compensation committee of Vivus, Inc., a publicly held pharmaceutical company. He holds a B.S. in Pharmacy from Fordham University and an M.B.A. from Iona College.

We believe that Mr. Casamento's qualifications to serve on our Board include his significant experience in operational and management roles within both large and small pharmaceutical companies, including Osteologix, Inc., Questcor Pharmaceuticals, Inc., Interneuron Pharmaceuticals and Hoffman-LaRoche, Inc. He also has extensive prior experience working in business development and provides the Company with extremely useful expertise in developing its business base, as highlighted by his position as Executive Director at The Sage Group, a consulting company specializing in the pharmaceutical space. Mr. Casamento also provides broad financial expertise that, as of December 31, 2012, assisted the Company as a member of our Compensation Committee and Audit Committee.

M. Ross Johnson, Ph.D. has served as a director of the Company since April 2002. From 2002 to 2008, Dr. Johnson served on the board of directors of ADVENTRX Pharmaceuticals, a biopharmaceutical company focused on the clinical development of antiviral and anticancer technologies. From 1995 to 1999, Dr. Johnson served as President, Chief Executive Officer and Chief Scientific Officer of Trimeris Inc., a pharmaceutical company that he took public in 1997. From 1987 to 1994, he served as Vice President of Chemistry at Glaxo Inc., where he was part of the original scientific founding team for Glaxo's research entry into the United States. From 1971 to 1987, Dr. Johnson served in key scientific and research management positions with Pfizer Central Research. Dr. Johnson currently holds board positions with Parion Sciences, Inc. and the University of North Carolina Education Advancement Board. He also served on the Advisory Boards of the College of Chemistry at the University of California at Berkeley, the Department of Chemistry at the University of North Carolina at Chapel Hill, the Biomanufacturing Research Institute and Technology Enterprise (BRITE) Center for Excellence located at North Carolina Central University and the Graduate Education Advisory Board at the University of North Carolina at Chapel Hill. He received his B.S. in Chemistry from the University of California, Berkeley, and a Ph.D. in Organic Chemistry from the University of California, Santa Barbara.

We believe that Dr. Johnson's qualifications to serve on our Board include his extensive contributions to drug discovery and development, which have resulted in over 300 scientific publications, patents and invited presentations, which include 119 issued patents, and his experience working on several advisory boards, as a chief executive officer and chief scientific officer of other private and public companies. His work experience at very large pharmaceutical companies and his expertise and success in the biotech start-up environment all lend to his considerable ability to help guide our Company. As of December 31, 2012, he served as Chairman of the Compensation Committee, Chairman of the Nominating and Governance Committee and as a member of both our Audit Committee and Research and Development Committee.

Mark A. Varney, Ph.D. has served as a director since May 2007. Dr. Varney was appointed Chief Scientific Officer and Chief Operating Officer in January 2006, and appointed President and Chief Executive Officer of the Company in August 2008. Prior to joining the Company Dr. Varney held the senior level position of Vice President and Head of Discovery at Sepracor, Inc., a publicly held pharmaceutical company, from June 2004 to January 2006. From July 2003 to June 2004, Dr. Varney was Vice President of Drug Discovery at Bionomics, Ltd., a publicly held biotechnology company that focuses on drugs to treat cancer and disorders of the central nervous system. From October 1994 to September 1999, Dr. Varney held positions of increasing responsibilities over his five-year tenure at SIBIA Neurosciences, Inc., a biotechnology company including his most recent position as Director of Neuropharmacology. Upon the acquisition of SIBIA by Merck, Inc. in September 1999, he was appointed a Director at Merck's San Diego facility until April 2003. Prior to SIBIA, he held research positions at Servier in France and Merck Sharp & Dohme in the U.K. Dr Varney received his B.Sc. in Biochemistry with honors from Surrey University, U.K. and completed his Ph.D. and postdoctoral training at Oxford University, U.K.

We believe that Dr. Varney's qualifications to serve on our Board include his position as the Company's President and Chief Executive Officer, and his experience working in senior level positions at Sepracor, Inc., Bionomics, Inc. and SIBIA (later as part of Merck, Inc). Dr. Varney provides the Board with both technical and scientific expertise in drug discovery and drug development, research management, governmental regulations and strategic planning expertise that is important to the advancement of our research platform as well as to the overall success of the Company.

In addition to the directors mentioned above, the Company notes that Robert F. Allnutt, Carl W. Cottman, Ph.D., Peter F. Drake, Ph.D, and Roger G. Stoll served as directors until August, 2012. In addition, Kathryn B. Hyer and Peter W. Letendre, Pharm.D. served as directors from August 2012 to September 2012 and David W. Carley, Ph.D. served as a director from August 2012 to October 2012.

Executive Officers

Each executive officer of the Company serves at the discretion of the Board of Directors. The names of the Company's executive officers and certain biographical information about them as of December 31, 2012 are set forth below:

Name	Age	Position with Company
Mark A. Varney, Ph.D.	45	President and Chief Executive Officer
Steven A. Johnson, Ph.D.	60	Vice President, Preclinical Development

The biographical summary for Dr. Varney was presented previously. There are no family relationships between any director or executive officer and any other director or executive officer.

Steven A. Johnson, Ph.D., was appointed Vice President of Preclinical Development in January 2004 and appointed as an executive officer of the Company in January 2007. Dr. Johnson has served as Director, Clinical Research from 2000 to 2003, Director, Biological Research from 1995 to 2000, and Senior Scientist of the Company from 1994 to 1995. From 1989 to 1994, Dr. Johnson was a Research Assistant Professor in the School of Gerontology at the University of Southern California. Prior to that, he conducted research in the field of the molecular biology of development at the California Institute of Technology, and conducted research in the field of molecular biology of Alzheimer's disease at the University of Southern California. A recipient of numerous federal, state and private grants, Dr. Johnson has published more than 50 scientific papers. He received his B.S. in Food Science from Oregon State University and his Ph.D. in Molecular Biology from Purdue University.

In addition to the Drs. Varney and Steven Johnson, the Company notes that Roger G. Stoll, Ph.D. served as Executive Chairman until August 2012; James H. Coleman served as Senior Vice President, Business Development until August 2012, and Maria Messinger served as a Vice President, Chief Financial Officer and Corporate Secretary of the Company until October 2012.

BOARD COMMITTEES

The board of directors has historically maintained a standing Audit Committee, Compensation Committee, and Governance and Nominations Committee. In 2012, the board of directors created a Special Committee to evaluate the then potential transaction with Pier Pharmaceuticals, Inc. This transaction was consummated on August 10, 2012, and is discussed in our Current Report on Form 8-K, filed on August 16, 2012. As noted above, since the Director Changes on March 22, 2013, the functions of each of the committees described below are currently being addressed by the full board of directors.

***Audit Committee*.** The Audit Committee meets with the Company's independent registered public accountants and management to prepare for and to review the results of the annual audit and to discuss the annual and quarterly financial statements, earnings releases and related matters. The Audit Committee, among other things, (i) selects and retains the independent registered public accountants, (ii) reviews with the independent registered public accountants the scope and anticipated cost of their audit, and their independence and performance, (iii) reviews accounting practices, financial structure and financial reporting, (iv) receives and considers the independent registered public accountants' comments as to controls, adequacy of staff and management performance and procedures in connection with audit and financial controls, (v) reviews and pre-approves all audit and non-audit services provided to the Company by the independent registered public accountants, and (vi) reviews and pre-approves all related-party transactions. The Audit Committee does not itself prepare financial statements or perform audits, and its members are not auditors or certifiers of the Company's financial statements.

On February 28, 2012, Charles J. Casamento resigned from the Audit Committee, but remained on the board of directors, the vacancy being filled by M. Ross Johnson, Ph.D. From February 28, 2012 through the end of the fiscal year ended December 31, 2012, the Audit Committee consisted of John Benedik as Chairman of the Committee, M. Ross Johnson, Ph.D. and Peter Drake, Ph.D. Based on Company records, the Audit Committee met three times during the fiscal year ended December 31, 2012. Since the change in composition of our board of directors in March 2013, the composition of the Audit Committee has not yet been determined, nor has the current board of directors adopted a written charter. Company records indicate that the Audit Committee previously operated under a written charter adopted by the previous board of directors. When an Audit Committee is reestablished along with a written charter, such charter will be made available on the Company's website at www.cortexpharm.com.

Compensation Committee. The functions of the Compensation Committee include, without limitation, administering the Company's incentive ownership programs and approving the compensation to be paid to the Company's directors and executive officers. The Compensation Committee meets no less frequently than annually as circumstances dictate to discuss and determine executive officer and director compensation. The Company's Chief Executive Officer annually reviews the performance of each executive officer (other than the Chief Executive Officer, whose performance is reviewed by the Compensation Committee). The conclusions reached and recommendations based on these reviews, including with respect to salary adjustments and annual award amounts, are presented to the Compensation Committee, who can exercise its discretion in modifying any recommended adjustments or awards to executive officers. The Compensation Committee is entitled to, but generally does not, retain the services of any compensation consultants. Based on Company records available to the current board of directors, neither the Compensation Committee nor management has engaged a compensation consultant in the past fiscal year. The Compensation Committee has the power to form and delegate authority to subcommittees when appropriate, provided that such subcommittees are composed entirely of directors who would qualify for membership on the Compensation Committee.

Company records indicate that M. Ross Johnson, Ph.D. (chair), Robert F. Allnutt and Charles J. Casamento began 2012 as the members of the Compensation committee. The Company has no records indicating any change in that composition during 2012, though some records are unavailable to the current board of directors. Company records suggest that the Compensation Committee met at least once in 2012, but, because such records are incomplete, we can provide no certain information on the actual number of meeting that were held by the Compensation Committee in 2012. Since the change in composition of our board of directors in March 2013, the members of the Compensation Committee have not yet been determined nor has the current board of directors adopted a written charter. Company records indicate that the Compensation Committee previously operated under a written charter adopted by the board of directors. When a Compensation Committee is reestablished along with a written charter, such charter will be made available on the Company's website at www.cortexpharm.com.

Governance and Nominations Committee. The functions of the Governance and Nominations Committee include, without limitation, (i) identifying individuals qualified to become members of the board of directors, (ii) recommending director nominees for the next annual meeting of stockholders and to fill vacancies that may be created by the expansion of the number of directors serving on the board of directors and by resignation, retirement or other termination of services of incumbent directors, (iii) developing and recommending to the board of directors corporate governance guidelines and changes thereto, (iv) ensuring that the board of directors and the Company's Certificate of Incorporation and Bylaws are structured in a way that best serves the Company's practices and objectives, (v) leading the board of directors in its annual review of the board of directors' performance; and (vi) recommending to the board of directors nominees for each committee. Accordingly, the Governance and Nominations Committee annually reviews the composition of the board of directors as a whole and makes recommendations, if deemed necessary, to enhance the composition of the board of directors. The Governance and Nominations Committee first considers a candidate's management experience and then considers issues of judgment, background, conflicts of interest, integrity, ethics and commitment to the goal of maximizing stockholder value when considering director candidates. The Governance and Nominations Committee also focuses on issues of diversity, such as diversity of gender, race and national origin, education, professional experience and differences in viewpoints and skills. The Governance and Nominations Committee does not have a formal policy with respect to diversity; however, the board of directors and Governance and Nominations Committee believe that it is essential that the members of the board of directors represent diverse viewpoints. In considering candidates for the board of directors, the Governance and Nominations Committee considers the entirety of each candidate's credentials in the context of these standards. With respect to the nomination of continuing directors for re-election, the individual's contributions to the board of directors are also considered.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's executive officers and directors and persons who beneficially own more than 10% of the Company's outstanding common stock, whom the Company refers to collectively as the "reporting persons," to file reports of ownership and changes in ownership with the SEC, and to furnish the Company with copies of these reports.

Based solely on the Company's review of the copies of these reports received by it and written representations received from certain of the reporting persons with respect to the filing of reports on Forms 3, 4 and 5, the Company believes that all such filings required to be made by the reporting persons for the fiscal year ended December 31, 2012 were made on a timely basis.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics, which covers all of our directors and employees, including our principal executive and financial officers. Any amendment to, or waiver from, any applicable provision (related to elements listed under Item 406(b) of Regulation S-K) of our Code of Business Conduct and Ethics that applies to our directors or executive officers will be posted on our website at www.cortexpharm.com or in a report filed with the SEC on Form 8-K. The Company is in the process of updating its Code of Business Conduct and Ethics. Any amendment or waiver to its Code of Business Conduct and Ethics that applies to its directors or executive officers will be posted on its website at www.cortexpharm.com and/or filed in a report with the Securities and Exchange Commission on Form 8-K.

Item 11. Executive Compensation

Summary Compensation Table

The table below summarizes the total compensation paid or earned by each of the named executive officers for the fiscal years ended December 31, 2012, 2011 and 2010. The information contained under the heading "All Other Compensation" for all named executive officers includes the estimated value of equity awards using the Black-Scholes option-pricing model and does not reflect actual cash payments or actual dollars awarded.

Name and Principal Position	Year	Salary ($)	Bonus ($)	All Other Compensation ($)(1)		Total ($)
Roger G. Stoll, Ph.D.	2012	$195,601	—	$ 477,680	(2)	$673,281
Executive Chairman	2011	$370,000	—			$370,000
	2010	$338,218	—			$338,218
Mark A. Varney, Ph.D.	2012	$190,601	—	$ 144,639	(3)	$335,240
President and Chief	2011	$362,000	—	$ 22,400	(4)	$384,400
Executive Officer	2010	$330,905	$30,000	$ 49,600	(5)	$410,505
Maria S. Messinger, CPA	2012	$127,995	—	$ 118,508	(6)	$246,503
Vice President, Chief	2011	$243,000	—			$243,000
Financial Officer and Corporate Secretary	2010	$222,127	$30,000			$252,127
James H. Coleman	2012	$138,384	—	$ 321,819	(2)	$460,203
Senior Vice President,	2011	$250,000	—	$ 9,279	(7)	$259,279
Business Development	2010	$228,526	—	$ 9,279	(7)	$237,805

Steven A. Johnson, Ph.D.	2012	$118,217	—	$ 107,126	(3) $225,343
Vice President of	2011	$221,000	—		$221,000
Preclinical Development	2010	$202,017	$30,000		$232,017

(1) In accordance with Securities and Exchange Commission rules, “Other Annual Compensation” in the form of perquisites and other personal benefits has been omitted where the aggregate amount of such perquisites and other personal benefits was less than $10,000.

(2) This amount includes amounts claimed by the individual in connection with his departure from the Company in 2012. The Company has recently settled with this individual with respect to such claimed amounts. See “Employment and Consulting Agreements – Termination or Change in Control”.

(3) This amount does not include all amounts claimed by the individual in connection with his departure from the Company in 2013. The Company has recently settled with this individual with respect to such claimed amounts. See “Employment and Consulting Agreements – Termination or Change in Control”.

(4) Represents payments by the Company to Dr. Varney under the terms of his employment agreement and related to his relocation to southern California, including $14,000 for a mortgage subsidy, subject to a gross-up of $8,400 to cover his additional income tax liabilities.

(5) Represents payments by the Company to Dr. Varney under the terms of his employment agreement and related to his relocation to southern California, including $31,000 for a mortgage subsidy, subject to a gross-up of $18,600, to cover his additional income tax liabilities.

(6) Ms. Messinger resigned as Vice President, Chief Financial Officer and Corporate Secretary on October 26, 2012. The Company does not believe that Ms. Messinger is entitled to any further compensation from the Company.

(7) Represents premiums for life insurance for Mr. Coleman, in lieu of participation in the Company’s medical benefit plans.

Narrative to Summary Compensation Table

In June 2004, the board of directors approved a performance-based incentive compensation program for named executive officers that included cash bonus targets of 20% of respective annual base salaries. Actual bonus amounts may differ from the established targets based upon our performance, as well as that of the individual named executive officer, as compared to established goals. No performance bonuses were awarded to the named executive officers for the years ended December 31, 2012 or 2011.

The exercise price for our stock options is no less than the fair market value of the stock on the date of the grant. Options generally vest at a rate of 33 1/3% per year starting on the anniversary date of the option grant and the vesting of any unvested portion is contingent upon the officer's continued employment with the Company. Accordingly, the option will provide a return to the named executive officer only if he or she remains in the Company's employ and the market price of the Company's common stock appreciates over the option term. The vested portion of the option will provide a return to the named executive officer regardless of whether he or she remains in our employee, but only if the market price of the our common stock appreciates over the option exercise price during the term of the vested options. There were no stock options received by the named executive officers during the years ended December 31, 2012 and 2011. As discussed in our current report on Form 8-K filed March 25, 2014, certain options with respect to an aggregate of 5,166,668 common stock shares were reportedly awarded to two of our former named executive officers in August, 2012, but these former executive officers claimed never to have received these options. In connection with entering into settlement agreements with these former officers, the Company agreed to formalize these previously reported awards. The value of these previously reported awards is included in the Summary Compensation Table above for these individuals under "All Other Compensation."

To better align the interests of the Company's named executive officers with those of its stockholders, to create ownership focus and to build long-term commitment, the Company previously adopted a common stock ownership policy for its named executive officers. The policy requires named executive officers to acquire and maintain ownership of at least 30,000 shares of the Company's common stock within three years of commencement of service as a named executive officer. The current board of directors is considering whether to maintain a similar policy.

In connection with the recent changes to our board membership, management is currently reevaluating the compensation and stock ownership policies of the Company and, as a result of that reassessment and in light of the Company's current financial circumstances, may make adjustments to such policies.

See also "Employment and Consulting Agreements - Termination or Change in Control" for further discussion of compensation arrangements pursuant to which the amounts listed under the Summary Compensation Table were paid or awarded and the criteria for such payment or award.

Outstanding Equity Awards at Fiscal Year-End

There were no outstanding unvested stock awards as of December 31, 2012. The table below relates solely to outstanding option awards as of December 31, 2012. Except as noted in the footnotes below, the options listed below vest at a rate of 33 1/3% per year commencing on the first anniversary of the date of grant and have a ten-year term.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable		Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price	Option Expiration Date
Roger G. Stoll, Ph.D.	3,083,334	(1)	—	—	$ 0.06	07/17/2022
Mark A. Varney, Ph.D.	588,000	(5)	—	—	$ 0.20	08/22/2019
	200,000	(5)	—	—	$ 0.97	08/13/2018
	200,000	(5)	—	—	$ 0.54	01/18/2018
	250,000	(5)	—	—	$ 1.30	12/18/2016
	750,000	(4)(5)	—	—	$ 2.95	01/30/2016
Maria S. Messinger, CPA	380,000	(5)	—	—	$ 0.20	08/22/2019
	100,000	(5)	—	—	$ 0.54	01/18/2018
	125,000	(5)	—	—	$ 1.30	12/18/2016
	100,000	(5)	—	—	$ 2.35	12/01/2015
	100,000	(5)	—	—	$ 2.68	12/16/2014
	75,000	(5)	—	—	$ 2.76	12/09/2013
	663	(3)(5)	—	—	$ 3.77	08/29/2013
	1,453	(3)(5)	—	—	$ 1.72	07/31/2013
	1,389	(3)(5)	—	—	$ 1.80	06/30/2013
	1,404	(3)(5)	—	—	$ 1.78	05/30/2013
	2,252	(3)(5)	—	—	$ 1.11	04/30/2013
	3,472	(3)(5)	—	—	$ 0.72	03/31/2013
	3,521	(3)(5)	—	—	$ 0.71	02/28/2013
James H. Coleman	2,083,334	(2)	—	—	$ 0.06	08/10/2022
Steven A. Johnson, Ph.D.	262,000	(5)	—	—	$ 0.20	08/22/2019
	100,000	(5)	—	—	$ 0.54	01/18/2018
	150,000	(5)	—	—	$ 1.30	12/18/2016
	100,000	(5)	—	—	$ 2.35	12/01/2015
	100,000	(5)	—	—	$ 2.68	12/16/2014
	50,000	(5)	—	—	$ 2.76	12/09/2013

(1) On July 17, 2012, pursuant to a severance agreement amended in connection with the merger transaction with Pier, Dr. Stoll was issued fully-vested, ten-year options to purchase a total of 3,083,334 shares of the Company's common stock at an exercise price of $0.06 per share, which was in excess of the closing price of the Company's common stock on the closing date of the merger.

(2)

On August 10, 2012, pursuant to a severance agreement amended in connection with the merger transaction with Pier, Mr. Coleman was issued fully-vested, ten-year options to purchase a total of 2,083,334 shares of the Company's common stock at an exercise price of $0.06 per share, which was in excess of the closing price of the Company's common stock on the closing date of the merger.

(3) Represents stock options issued in lieu of a portion of base salary. The number of options issued represents the dollar value of base salary not received by the named executive officer divided by the closing sale price of the Company's common stock on the NYSE Amex on the last trading day of the month during which the portion of base salary was not received by the named executive officer. These options were fully vested on the date of grant.

(4) In connection with his employment, Dr. Varney was granted options to purchase 750,000 shares of the Company's common stock at an exercise price of $2.95 per share, representing the closing price of the Company's common stock on the date of grant. Of the 750,000 options granted, 100,000 options vested upon his first date of employment on January 30, 2006; 100,000 options vested one year from his initial date of employment, or January 30, 2007; and 550,000 options vested in equal annual installments over a three-year period from the date of grant.

(5) Represents options expired or forfeited prior to the date of this Annual Report on Form 10-K.

OPTION EXERCISES AND STOCK VESTED FOR 2012

None of the Company's named executive officers exercised any options to purchase shares of the Company's common stock or had any outstanding unvested stock awards during the year ended December 31, 2012.

Employment and Consulting Agreements – Termination or Change in Control

As of December 31, 2012, three of the named executive officers listed above, Roger G. Stoll, James H. Coleman and Maria S. Messinger had left the Company. The remaining officers Mark A. Varney and Steven A. Johnson, were removed as officers by the new board of directors on March 22, 2013. Each of these officers had entered into employment agreements and/or severance agreements governing payments upon termination or in the event the Company became subject to a change-in-control. Because each executive officer listed in the summary compensation table for 2012 either departed in 2012 or was removed in early 2013, the terms and conditions related to the departure of those officers, under their respective employments agreements, as amended, are known. The details of the contracts applicable to the departure for each officer are discussed below. The Company has recently entered into settlement agreements with several of these officers regarding the amounts owed. Accordingly, the ultimate amounts paid in respect to the departures of these officers were different than the contractual amounts described below.

The new officers appointed by the board of directors have not yet entered into employment agreements. Once these agreements are reached, the Company will disclose the information required regarding these agreements, consistent with applicable law. As reported in the Company's Current Report on Form 8-K filed April 18, 2014, these officers have been awarded shares of common stock in the Company.

With respect to former named executive officers:

Roger G. Stoll, Ph.D. left the Company in August 2012. At the time of his departure, Mr. Stoll's contract called for payments of $71,154 for paid time off, $36,526 for reduced or deferred compensation, $61,667 in severance and $123,333 for consulting fees for a total of $292,680. He also claims to be entitled to reimbursement of $10,000 in legal fees.

Mr. Varney was removed as an officer of the Company on March 22, 2013. As of December 31, 2012, his annual salary was $365,000. At the time of his departure, Mr. Varney's contract called for payments of $35,674 for paid time off, $108,965 for reduced or deferred compensation in 2012, and $365,000 in severance for a total of $509,639.

Maria S. Messinger left the Company in October 2012. At the time of her departure, Ms. Messinger's contract called for payments of $46,731 for paid time off and $77,777 for reduced or deferred compensation for a total of $118,508.

The Company does not believe that Ms. Messinger is entitled to any further compensation from the Company.

James H. Coleman left the Company in August 2012. At the time of his departure, Mr. Coleman's contract called for payments of $47,140 for paid time off, $24,679 for reduced or deferred compensation, $41,667 in severance and $83,333 for consulting fees for a total of $196,819.

Mr. Johnson was removed as an officer of the Company on March 22, 2013. As of December 31, 2012, his annual salary was $220,000. At the time of his departure, Mr. Johnson's contract called for payments of $42,224 for paid time off, $64,902 for reduced or deferred compensation in 2012, and $220,000 in severance for a total of $327,126.

The Company has recently executed settlement agreements with Messrs. Stoll, Varney, Coleman and Johnson that resulted in the settlement of potential claims totaling approximately $1,336,000 for a total of approximately $118,000 in cash, plus the issuance of options to purchase 4,300,000 shares of common stock exercisable at $0.04 per share for periods ranging from five to ten years. In the case of two of these former executives, the Company also agreed to formalize the issuance of options to purchase 5,166,668 shares of common stock exercisable at $0.06 per share that had previously been reported as issued on Form 4's in August 2012, but that the former executives claimed they had never received. In addition to other provisions, the settlement agreements include mutual releases.

Director Compensation

The Compensation Committee uses a combination of cash and stock-based incentive compensation to attract and retain qualified candidates to serve on the Board of Directors. In setting director compensation, the Compensation Committee considers the significant amount of time that directors expend in fulfilling their duties to the Company as well as the skill-level required by the Company of members of the Board of Directors. Similar to executive officers, as of December 31, 2012, directors were subject to a minimum share ownership requirement. The policy required directors to acquire and maintain ownership of at least 30,000 shares of the Company's common stock before December 16, 2007, or within three years of commencement of service as a director, whichever is later. Thereafter, the policy provided for the withholding of fees until the ownership level has been achieved by such director. The Board of Directors determined that as of December 31, 2012 all directors serving the Company have met the minimum share ownership requirement.

Director Summary Compensation Table

The following table shows the compensation received by the non-employee members of our board of directors for the year ended December 31, 2012. Directors who are also employees of the Company did not receive any additional compensation for services as a director.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Option Awards ($)[1]	Total ($)
Robert F. Allnut (2)	14,000	0	20,000	34,000
John F. Benedik (8)	26,000	0	27,800	53,800
Charles J. Casamento (8)	16,000	0	22,600	38,600
Carl W. Cotman, Ph.D. (2)	10,000	0	14,800	24,800
Peter F. Drake, Ph.D. (2)	17,000	0	22,600	39,600

Moogak Hwang, Ph.D. (3) (9)	0	0	0	0
M. Ross Johnson (8)	19,000	0	23,900	42,900
Kathryn B. Hyer (4) (5)	0	0	0	0
David W. Carley, Ph.D. (4) (7)	0	0	0	0
Peter Letendre, Pharm.D. (4) (6)	0	0	0	0

(1) Amounts represent the aggregate grant date fair value of the option awards using the Black-Scholes option-pricing model.

(2) Resigned from the board of directors on August 10, 2012.

(3) Appointed to the board of directors on August 3, 2012.

(4) Appointed to the board of directors on August 10, 2012.

(5) Resigned from the board of directors on September 25, 2012.

(6) Resigned from the board of directors on September 28, 2012.

(7) Resigned from the board of directors on October 1, 2012.

(8) Removed from the board of directors by written consent on March 22, 2013.

(9) Resigned from the board of directors on September 30, 2013.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Beneficial Ownership of Common Stock

The following table sets forth certain information regarding the beneficial ownership of the Company's common stock as of March 22, 2013, by (i) each person known by the Company to be the beneficial owner of more than 5% of the outstanding common stock, (ii) each of the Company's directors, (iii) each of the Company's named executive officers, and (iv) all of the Company's executive officers and directors as a group. Except as indicated in the footnotes to this table, the Company believes that the persons named in this table have sole voting and investment power with respect to the shares of common stock indicated. In computing the number and percentage ownership of shares beneficially owned by a person, shares of common stock that a person has a right to acquire within sixty (60) days of March 22, 2013 pursuant to options, warrants or other rights are considered as outstanding, while these shares are not considered as outstanding for computing the percentage ownership of any other person or group. March 22, 2013 is the date that new management was put in place by written consent of the stockholders (see Note 12 to our consolidated financial statements for the years ended December 31, 2012 and 2011—Subsequent Events—*Changes in Officers and Directors*).

Directors, Officers and 5% Stockholders[1]	**Number of Shares of Beneficial Ownership of Common Stock**	**Percent of Class[2]**	
Origin Ventures II, L.P. (and affiliates)[3]	24,200,507	16.80	%
SY Corporation Co., Ltd.[4]	22,113,831	14.77	%
Illinois Emerging Technology Fund, LP (and affiliates)[5]	20,334,546	14.12	%
Arnold S. Lippa, Ph.D.[6]	2,971,792	2.06	%
Jeff E. Margolis[6]	2,971,792	2.06	%
Robert N. Weingarten	0	0	%
All directors and officers as a group	2,971,792	2.06	%

(1) Except as otherwise indicated, the address of such beneficial owner is c/o Cortex Pharmaceuticals, Inc., 126 Valley Road, Suite C, Glen Rock, New Jersey 07452.

(2) Based on 144,041,556 shares issued and outstanding as of March 22, 2013, plus, in the case of SY Corporation Co., Ltd., warrants then exercisable to purchase up to 5,691,367 shares of common stock.

(3) Pursuant to Schedule 13D filed with the SEC on March 22, 2013. These shares are held by Origin Ventures II, L.P., which holds voting and dispositive control with respect to such shares. Origin Ventures II Management, LLC,

the general partner of Origin Ventures II, L.P., and Bruce Barron and Steven N. Miller, the managing members of Origin Ventures II Management, LLC, may be deemed to beneficially own such shares, and to share voting and dispositive control of the shares owned by Origin Ventures II, L.P.

(4) Pursuant to Schedule 13D filed with the SEC on March 22, 2013. Consists of (i) 16,422,464 shares of Cortex Pharmaceuticals, Inc. common stock, (ii) a warrant to purchase up to 4,000,000 shares of common stock at an exercise price of $0.056 per share, and (iii) a warrant to purchase up to 1,691,367 shares of common stock at an exercise price of $0.1035 per share (which subsequently expired unexercised). SY Corporation Co., Ltd.was formerly known as Samyang Optics Co. Ltd.

(5) Pursuant to Schedule 13G filed with the SEC on August 20, 2012, Illinois Emerging Technology Fund, LP owns 20,334,546 shares and holds voting and dispositive control with respect to such shares. Illinois Ventures GP, LLC is the general partner of Illinois Emerging Technology Fund, LP, and may be deemed to beneficially own such shares, and to share voting and dispositive control of the shares.

(6) Aurora Capital LLC holds 2,971,792 shares of common stock. Aurora Capital Corp., a New York Corporation and T Morgen Capital LLC, a New Jersey LLC, are managing members of Aurora Capital LLC. Jeff Margolis is the Manager and President of Aurora Capital LLC, as well as the sole shareholder and Director of Aurora Capital Corp. Arnold S. Lippa is a manager of T Morgen Capital LLC. By virtue of their control of Aurora Capital LLC, Aurora Capital Corp., and T Morgen Capital LLC, Arnold S. Lippa and Jeff Margolis may be deemed to share beneficial ownership of (and, with respect to Mr. Margolis, voting and dispositive power with respect to) the shares of common stock beneficially owned by Aurora Capital LLC.

The Company is not aware of any arrangements that may at a subsequent date result in a change of control of the Company.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information regarding outstanding options, warrants and rights and shares reserved for future issuance under our existing equity compensation plans as of December 31, 2012. Our stockholders approved the Company's 1996 Stock Incentive Plan, as amended and restated, and the Company's 2006 Stock Incentive Plan, as amended. Following the expiration of the 1996 Stock Incentive Plan in October 2006, all subsequently granted stock options were and will be issued from the 2006 Stock Incentive Plan.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)		Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	5,587,487		$ 1.02	5,745,466
Equity compensation plans not approved by security holders	5,166,668	(1)	$ 0.06	—
Total	10,754,155		$ 0.56	5,745,466

(1) In July and August 2012, pursuant to severance agreements amended in connection with the merger transaction with Pier, fully-vested, ten year stock options to purchase a total of 5,166,668 shares of the Company's common stock at an exercise price of $0.06 per share, which was in excess of the closing price of the Company's common stock on the closing date of the Pier transaction, were granted to two of the Company's officers, outside of the 1996 Stock Incentive Plan and the 2006 Stock Incentive Plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Director Independence

As of December 31, 2012, majority of members of the Board of Directors were "independent director[s]", as that term is defined under Section 803 of the NYSE Amex Company Guide. The Board of Directors has affirmatively determined that the following three directors are independent: John F. Benedik, Charles J. Casamento, and M. Ross Johnson.

Audit Committee. Each member of the Company's standing Audit Committee is an "independent director" as defined under Section 803 of the NYSE Amex Company Guide, and is "independent" as that term is used in Rule 10A-3 promulgated under the Securities Exchange Act of 1934, as amended.

Compensation Committee. Each member of the Company's standing Compensation Committee is an "independent director" as defined under Section 803 of the NYSE Amex Company Guide.

Governance and Nominations Committee. Each member of the Company's Governance and Nominations Committee is an "independent director" as defined under Section 803 of the NYSE Amex Company Guide.

Transactions with Related Persons

There were no disclosable transactions with related persons under Item 404 of Regulation S-K during the fiscal year ended December 31, 2012 or December 31, 2011, or then-currently proposed.

As has been previously disclosed in the Company's filings with the SEC, including the Company's Current Report on Form 8-K filed on July 23, 2012 and the Company's Quarterly Report on Form 10-Q filed on August 16, 2012, the Company renegotiated the employment agreements of certain officers who left the Company in 2012 in connection with or immediately prior to their departures.

Since December 31, 2012, the Company has engaged in certain transactions with Arnold S. Lippa, our Chairman and Chief Executive Officer, and certain of his affiliates. These transactions have been previously disclosed and are discussed in Note 1 to our consolidated financial statements for the years ended December 31, 2012 and 2011—Organization and Business Operations—*Going Concern* and Note 12 to our consolidated financial statements for the years ended December 31, 2012 and 2011—Subsequent Events—*Working Capital Advances.*

Item 14. Principal Accounting Fees and Services

Haskell & White LLP, acted as our independent registered public accounting firm for the fiscal years ended December 31, 2011 and 2012 and for the interim periods in such fiscal years. The following table shows the approximate fees that were incurred by us for audit and other services provided by Haskell & White LLP in fiscal 2011 and 2012.

	2011	2012
Audit Fees[1]	$83,000	$81,000
Audit-Related Fees[2]	8,000	—
Tax Fees[3]	14,000	11,000
All Other Fees[4]	—	—
Total	$105,000	$42,000

(1) Audit fees represent fees for professional services provided in connection with the audit of our annual financial statements and the review of our financial statements included in our Form 10-Q quarterly reports and services that are normally provided in connection with statutory or regulatory filings.

(2) Audit-related fees represent fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and not reported above under “Audit Fees.”

(3) Tax fees represent fees for professional services related to tax compliance, tax advice and tax planning.

(4) All other fees represent fees related to Sarbanes-Oxley compliance work.

All audit related services, tax services and other services rendered by Haskell & White LLP were pre-approved by our Board of Directors. The Board of Directors has adopted a pre-approval policy that provides for the pre-approval of all services performed for us by our independent registered public accounting firm.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) List of documents filed as part of this report:

(1) Financial Statements

Reference is made to the Index to Financial Statements on page F-1, where these documents are listed.

(2) Financial Statement Schedules

The financial statement schedules have been omitted because the required information is not applicable, or not present in amounts sufficient to require submission of the schedules, or because the information is included in the financial statements or notes thereto.

(3) Exhibits

See (b) below.

(b) Exhibits:

A list of exhibits required to be filed as part of this Annual Report on Form 10-K is set forth in the Index to Exhibits, which is presented elsewhere in this document, and is incorporated herein by reference.

CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

(INCLUDING REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM)

Years Ended December 31, 2012 and 2011

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors

Cortex Pharmaceuticals, Inc. and Subsidiary

We have audited the accompanying consolidated balance sheets of Cortex Pharmaceuticals, Inc. and Subsidiary (the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, stockholders' equity (deficiency) and cash flows for each of the years in the two-year period ended December 31, 2012. Cortex Pharmaceuticals, Inc.'s management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cortex Pharmaceuticals, Inc. as of December 31, 2012 and 2011, and the consolidated results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 of the consolidated financial statements, the Company does not currently possess sufficient working capital to fund its operations and commitments. This raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to this matter are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ HASKELL & WHITE LLP

Irvine, California

October 13, 2014

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CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

	December 31, 2012	2011
ASSETS		
Current assets:		
Cash and cash equivalents	$152,179	$1,610,945
Restricted cash	—	48,309
Other current assets	17,002	85,630
Total current assets	169,181	1,744,884
Furniture, equipment and leasehold improvements, net	—	66,882
Other	29,545	8,889
Total assets	$198,726	$1,820,655
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)		
Current liabilities:		
Accounts payable and accrued expenses	$1,509,827	$472,756
Accrued compensation and related expenses	885,180	235,399
Note payable to related party, including accrued interest of $25,340	465,392	—
Unearned revenue	—	48,309
Project advance, including accrued interest of $82,722 and $76,479 at December 31, 2012 and 2011, respectively	330,022	323,779
Deferred rent	—	64,502
Total current liabilities	3,190,421	1,144,745
Commitments and contingencies (Note 11)		
Stockholders' equity (deficiency):		
Series B convertible preferred stock, $0.001 par value; $0.6667 per share liquidation preference; aggregate liquidation preference $25,001; shares authorized: 37,500; shares issued and outstanding: 37,500; common shares issuable upon conversion at 0.09812 per share: 3,679	21,703	21,703
Common stock, $0.001 par value; shares authorized: 205,000,000; shares issued and outstanding: 144,041,556 and 85,623,663 at December 31, 2012 and 2011, respectively	144,041	85,624
Additional paid-in capital	125,183,892	121,337,670

Accumulated deficit	(128,341,331)	(120,769,087
Total stockholders' equity (deficiency)	(2,991,695)	675,910
Total liabilities and stockholders' equity (deficiency)	$198,726	$1,820,655

See accompanying notes to consolidated financial statements and

report of independent registered public accounting firm.

CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31, 2012	2011
Revenues:		
License revenue	$—	$3,000,000
Grant revenue	48,309	114,605
Total revenues	48,309	3,114,605
Operating expenses:		
General and administrative	1,946,597	3,189,177
Research and development	826,702	2,187,695
Pier merger-related costs (Note 3)	1,246,107	—
Impairment loss from termination of license agreement (Note 4)	3,321,678	—
Loss on settlement of office lease	39,126	—
Total operating expenses	7,380,210	5,376,872
Loss from operations	(7,331,901)	(2,262,267)
Interest income	92	1,856
Interest expense, including $169,258 to a related party for the year ended December 31, 2012	(196,984)	(4,019)
Foreign currency transaction loss	(40,278)	—
Gain (loss) on sale of assets	(3,173)	9,110
Net loss	$(7,572,244)	$(2,255,320)
Net loss per common share - Basic and diluted	$(0.07)	$(0.03)
Weighted average common shares outstanding - Basic and diluted	108,448,141	79,988,864

See accompanying notes to consolidated financial statements and

report of independent registered public accounting firm.

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CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIENCY)

Years Ended December 31, 2012 and 2011

	Series B Convertible Preferred Stock		Common Stock		Additional		**Total Stockholders'**
	Shares	Dollar Amount	Shares	Par Value	Paid-in Capital	Accumulated Deficit	**Equity (Deficiency)**
Balance, December 31, 2010	37,500	$21,703	78,858,197	$78,858	$120,816,472	$(118,513,767)	$2,403,266
Issuance of shares of common stock in connection with private placement	—	—	6,765,466	6,766	471,036	—	477,802
Fair value of stock-based payments made to consultants and other service providers	—	—	—	—	1,161	—	1,161
Stock-based compensation expense	—	—	—	—	49,001	—	49,001
Net loss	—	—	—	—	—	(2,255,320)	(2,255,320)
Balance, December 31, 2011	37,500	21,703	85,623,663	85,624	121,337,670	(120,769,087)	675,910
Issuance of shares of common stock in connection with the acquisition of Pier Pharmaceuticals, Inc. (Note 3)	—	—	58,417,893	58,417	3,212,985	—	3,271,402
Fair value of warrant issued in connection with note payable	—	—	—	—	143,919	—	143,919
Stock-based compensation expense	—	—	—	—	489,318	—	489,318

Net loss	—	—	—	—	—	(7,572,244)	(7,572,244)
Balance, December 31, 2012	37,500	$21,703	144,041,556	$144,041	$125,183,892	$(128,341,331)	$(2,991,695)

See accompanying notes to consolidated financial statements and

report of independent registered public accounting firm.

CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,	
	2012	2011
Cash flows from operating activities:		
Net loss	$(7,572,244)	$(2,255,320)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	26,383	106,971
Amortization of license agreement	89,479	—
Impairment loss from termination of license agreement	3,321,678	—
Loss on settlement of office lease	39,126	—
Loss from reduction in carrying value of furniture and equipment	—	43,643
Stock-based compensation costs	179,318	50,162
Pier merger-related costs paid in common stock options	310,000	—
Foreign currency transaction loss	40,278	—
Amortization of capitalized financing costs	19,408	—
Amortization of discount on note payable	143,919	—
(Gain) loss on sales of assets	3,173	(9,110)
Changes in operating assets and liabilities:		
(Increase) decrease in -		
Restricted cash	48,309	107,427
Accrued interest on marketable securities	—	2,992
Other current assets	69,325	4,177
Other non-current assets	(20,656)	32,484
Increase (decrease) in -		
Accounts payable and accrued expenses	871,908	78,975
Accrued compensation and related expenses	649,781	(39,954)
Unearned revenue	(48,309)	(107,427)
Deferred rent	(64,329)	53,214
Accrued interest payable	31,583	4,018
Other non-current liabilities	—	(8,063)
Net cash used in operating activities	(1,861,870)	(1,935,811)
Cash flows from investing activities:		
Proceeds from sales and maturities of marketable securities	—	1,990,000
Cash acquired in connection with acquisition of Pier Pharmaceuticals, Inc.	23,208	—
Proceeds from sales of equipment	6,785	41,405
Purchases of furniture and equipment	(5,293)	—

Net cash provided by investing activities	24,700	2,031,405
Cash flows from financing activities:		
Proceeds from the issuance of common stock	—	500,000
Costs related to the issuance of common stock	—	(22,198)
Proceeds from issuance of note payable	399,774	—
Financing costs related to issuance of note payable	(21,370)	—
Net cash provided by financing activities	378,404	477,802
Cash and cash equivalents:		
Net (decrease) increase	(1,458,766)	573,396
Balance at beginning of period	1,610,945	1,037,549
Balance end of period	$152,179	$1,610,945

(Continued)

CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Continued)

	Years Ended December 31,	
	2012	2011
Supplemental disclosures of cash flow information:		
Cash paid for -		
Interest	$—	$—
Income taxes	$—	$—
Non-cash investing and financing activities:		
Fair value of common stock issued in connection with acquisition of Pier Pharmaceuticals, Inc.	$3,271,402	$—
Fair value of warrant issued in connection with note payable	$143,919	$—
Write-off of fully-depreciated fixed assets	$834,016	$1,567,534

See accompanying notes to consolidated financial statements and

report of independent registered public accounting firm.

CORTEX PHARMACEUTICALS, INC.

AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Years Ended December 31, 2012 and 2011

1. Organization and Business Operations

Business

Cortex Pharmaceuticals, Inc. ("Cortex" or the "Company") was formed in 1987 to engage in the discovery, development and commercialization of innovative pharmaceuticals for the treatment of neurological and psychiatric disorders. In 2011, prior management conducted a re-evaluation of the Company's strategic focus and determined that clinical development in the area of respiratory disorders, particularly respiratory depression and sleep apnea, provided the most cost-effective opportunities for potential rapid development and commercialization of the Company's compounds. Accordingly, the Company narrowed its clinical focus at that time and abandoned other avenues of scientific inquiry. This re-evaluation provided the impetus for the Company's acquisition of Pier Pharmaceuticals, Inc. ("Pier") in August 2012 (see Note 3). Since new management's appointment in March 2013, new management has continued to implement this revised strategic focus, including seeking the capital to fund such efforts. As a result of the Company's scientific discoveries and the acquisition of strategic, exclusive license agreements (including a new license agreement with the University of Illinois, as described at Note 12), management believes that the Company is now a leader in the discovery and development of innovative pharmaceuticals for the treatment of respiratory disorders.

Since its formation in 1987, Cortex has been engaged in the research and clinical development of a class of compounds referred to as ampakines. By acting as positive allosteric modulators of AMPA glutamate receptors, ampakines increase the excitatory effects of the neurotransmitter glutamate. Preclinical research suggested that these ampakines might have therapeutic potential for the treatment of certain respiratory disorders, as well as cognitive disorders, depression, attention deficit disorder and schizophrenia.

In its early stages, Cortex entered into a series of license agreements in 1993 and 1998 with the University of California, Irvine ("UCI") that granted Cortex proprietary rights to certain chemical compounds that acted as ampakines

and their therapeutic uses. These agreements granted Cortex, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the license agreement, that were then held by UCI; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the license agreements, subject to the provisions of the license agreements. Cortex was required, among other terms and conditions, to pay UCI a license fee, royalties, patent costs and certain additional payments.

At December 31, 2012, the Company was not in compliance with its minimum annual payment obligations and believed that this default constituted a termination of the license agreements. On April 15, 2013, UCI notified the Company that these license agreements were terminated due to the Company's failure to make its obligatory payments. Since the patents covered in these license agreements had begun to expire and the therapeutic uses described in these patents were no longer germane to the Company's new focus on respiratory disorders, the loss of these license agreements is not expected to have a material impact on the Company's current or future drug development programs.

Cortex also owns patents and patent applications for certain families of chemical compounds, including ampakines, which claim the chemical structures and their use in the treatment of various disorders. These patents cover, among other compounds, Cortex's lead ampakines CX 1739 and CX1942, and extend through at least 2028.

On May 8, 2007, Cortex entered into a license agreement, as subsequently amended, with the University of Alberta granting Cortex exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. These patents, along with Cortex's own patents claiming chemical structures, comprise Cortex's principal intellectual property supporting Cortex's research and clinical development program in the use of ampakines for the treatment of respiratory disorders. Cortex has completed pre-clinical studies indicating that several of its ampakines, including CX717, CX1739 and CX1942, were efficacious in treating drug induced respiratory depression caused by opiates or certain anesthetics without offsetting the analgesic effects of the opiates or the anesthetic effects of the anesthetics. In two clinical Phase 2 studies, one of which was published in a peer-reviewed journal, CX717, a predecessor compound to CX1739 and CX1942, antagonized the respiratory depression produced by fentanyl, a potent narcotic, without affecting the analgesia produced by this drug. In addition, Cortex has conducted a Phase 2A clinical study in which patients with sleep apnea were administered CX1739, Cortex's lead clinical compound. Preliminary results suggested that CX1739 might have use for the treatment of central and mixed sleep apnea, but not obstructive sleep apnea.

In order to expand Cortex's respiratory disorders program, the Company acquired 100% of the issued and outstanding equity securities of Pier effective August 10, 2012 pursuant to an Agreement and Plan of Merger (see Note 3). Pier was formed in June 2007 (under the name SteadySleep Rx Co.) as a clinical stage pharmaceutical company to develop a pharmacologic treatment for the respiratory disorder known as obstructive sleep apnea and had been engaged in research and clinical development activities since formation.

Through the merger, the Company gained access to an Exclusive License Agreement, as amended (the "License Agreement"), that Pier had entered into with the University of Illinois on October 10, 2007. The License Agreement covered certain patents and patent applications in the United States and other countries claiming the use of certain compounds referred to as cannabinoids, of which dronabinol is a specific example, for the treatment of sleep related breathing disorders (including sleep apnea). Dronabinol is a synthetic derivative of the naturally occurring substance in the cannabis plant, otherwise known as Δ9-THC (Δ9-tetrahydrocannabinol). Pier's business plan was to determine whether dronabinol would significantly improve subjective and objective clinical measures in patients with obstructive sleep apnea. In addition, Pier intended to evaluate the feasibility and comparative efficacy of a proprietary formulation of dronabinol.

The License Agreement granted Pier, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the License Agreement, that were then held by the University of Illinois; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the License Agreement, subject to the provisions of the License Agreement. Pier was required under the License Agreement, among other terms and conditions, to pay the University of Illinois a license fee, royalties, patent costs and certain milestone payments.

Prior to the merger, Pier conducted a 21 day, randomized, double-blind, placebo-controlled dose escalation Phase 2 clinical study in 22 patients with obstructive sleep apnea ("OSA"), in which dronabinol produced a statistically significant reduction in the Apnea-Hypopnea Index (AHI), the primary therapeutic end-point, and was observed to be

safe and well tolerated. Dronabinol is currently under investigation, at the University of Illinois and other centers, in a potentially pivotal 120 patient, double-blind, placebo-controlled Phase 2B OSA clinical trial, fully funded by the National Institutes of Health.

Dronabinol is a Schedule III, controlled generic drug with a relatively low abuse potential that is approved by the U.S. Food and Drug Administration ("FDA") for the treatment of AIDS-related anorexia and chemotherapy induced emesis. The use of dronabinol for the treatment of OSA is a novel indication for an already approved drug and, as such, the Company believes that it would only require approval by the FDA of a supplemental new drug application.

The License Agreement was terminated effective March 21, 2013 due to the Company's failure to make a required payment (see Note 4). New management subsequently opened negotiations with the University of Illinois, as a result of which the Company ultimately entered into a new license agreement with the University of Illinois on June 27, 2014 that is similar, but not identical, to the License Agreement that had been terminated on March 21, 2013 (see Note 12).

Going Concern

The Company's consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has incurred net losses of $7,572,244 and $2,255,320 for the fiscal years ended December 31, 2012 and 2011, respectively, negative operating cash flows of $1,861,870 and $1,935,811 for the fiscal years ended December 31, 2012 and 2011, respectively, and incurred additional net losses and negative operating cash flows in the 2013 and 2014 fiscal years. The Company expects to continue to incur net losses and negative operating cash flows for several more years thereafter. As a result, management and the Company's auditors believe that there is substantial doubt about the Company's ability to continue as a going concern.

The Company is currently, and has for some time, been in significant financial distress. It has limited cash resources and current assets and has no ongoing source of revenue. Since late 2012, the Company's business activities have been reduced to minimal levels, and the prior management of the Company, which was removed by the written consent of stockholders holding a majority of the outstanding shares on March 22, 2013, had retained bankruptcy counsel to assist it in preparations to file for liquidation under Chapter 7 of the United States Bankruptcy Code. New management, which was appointed during March and April 2013, has evaluated the status of numerous aspects of the Company's existing business and obligations, including, without limitation, debt obligations, financial requirements, intellectual property, licensing agreements, legal and patent matters and regulatory compliance, and has raised new capital to fund its business activities.

From June 2013 through March 2014, the Company's Chairman and Chief Executive Officer advanced short-term loans to the Company aggregating $150,000 in order to meet its minimum operating needs. In March and April 2014, the Company completed a private placement by selling 928.5 shares of its Series G Preferred Stock for gross proceeds of $928,500 (see Note 12) and repaid the aggregate advances. The Company's Chairman and Chief Executive Officer invested $250,000 in the Series G Preferred Stock private placement. Subsequent to the closing of this private placement, the Company has continued efforts to raise additional operating capital through various means to fund its operating activities and debt obligations.

The Company will not be able to pay its liabilities and fund its business activities going forward without raising additional capital. As a result of the Company's current financial situation, the Company has limited access to external sources of debt and equity financing. Accordingly, there can be no assurances that the Company will be able to secure additional financing in the amounts necessary to fully fund its operating and debt service requirements. If the Company is unable to access sufficient cash resources, the Company may be forced to discontinue its operations entirely and liquidate.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the financial statements of Cortex and Pier, its wholly-owned subsidiary, from its August 10, 2012 acquisition date. Intercompany balances and transactions have been eliminated in consolidation.

Cash Concentrations

The Company's cash balances may periodically exceed federally insured limits. The Company has not experienced a loss in such accounts to date. The Company maintains its accounts with financial institutions with high credit ratings.

Cash Equivalents

The Company considers all highly liquid short-term investments with maturities of less than three months when acquired to be cash equivalents.

Marketable Securities

Marketable securities are carried at fair value, with unrealized gains and losses, net of any tax, reported as a separate component of stockholders' equity. The Company utilizes observable inputs based on quoted prices in active markets for identical assets to record the fair value of its marketable securities. Authoritative guidance that establishes a framework for fair value for GAAP deems observable inputs for identical assets as Level 1 inputs, the most reliable in the hierarchy of inputs for determining fair value measurements.

The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income. Realized gains and losses and declines in value judged to be other-than-temporary on short-term investments are included in interest income. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and short-term investments. The Company limits its exposure to credit risk by investing its cash with high credit quality financial institutions.

Fair Value of Financial Instruments

The authoritative guidance with respect to fair value established a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels, and requires that assets and liabilities carried at fair value be classified and disclosed in one of three categories, as presented below. Disclosure as to transfers into and out of Levels 1 and 2, and activity in Level 3 fair value measurements, is also required.

Level 1. Observable inputs such as quoted prices in active markets for an identical asset or liability that the Company has the ability to access as of the measurement date. Financial assets and liabilities utilizing Level 1 inputs include active-exchange traded securities and exchange-based derivatives.

Level 2. Inputs, other than quoted prices included within Level 1, which are directly observable for the asset or liability or indirectly observable through corroboration with observable market data. Financial assets and liabilities utilizing Level 2 inputs include fixed income securities, non-exchange based derivatives, mutual funds, and fair-value hedges.

Level 3. Unobservable inputs in which there is little or no market data for the asset or liability which requires the reporting entity to develop its own assumptions. Financial assets and liabilities utilizing Level 3 inputs include infrequently-traded, non-exchange-based derivatives and commingled investment funds, and are measured using present value pricing models.

The Company determines the level in the fair value hierarchy within which each fair value measurement falls in its entirety, based on the lowest level input that is significant to the fair value measurement in its entirety. In determining the appropriate levels, the Company performs an analysis of the assets and liabilities at each reporting period end.

Furniture, Equipment and Leasehold Improvements

Furniture, equipment and leasehold improvements are recorded at cost and depreciated on a straight-line basis over the lesser of their estimated useful lives, ranging from five to ten years, or the life of the lease, as appropriate.

Long-Lived Assets

The Company reviews its long-lived assets, including intangible assets such as the License Agreement, for impairment whenever events or changes in circumstances indicate that the total amount of an asset may not be recoverable, but at least annually, in conjunction with the preparation of the Company's fiscal year-end audited financial statements. An impairment loss is recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition is less than the asset's carrying amount. The Company does not have any goodwill.

License Agreement

The License Agreement with the University of Illinois acquired in the Pier transaction was an acquired intangible asset recorded at cost of $3,411,157 (based on the fair value ascribed to the License Agreement in August 2012, as described in Note 3), and was being amortized on a straight-line basis over the remaining life of its underlying patents of 172 months from the date of acquisition.

The Company performed an impairment assessment of the carrying value of the License Agreement as of December 31, 2012 and determined that the carrying value of the License Agreement had no future value at such date. Accordingly, the Company recorded an impairment charge to operations of $3,321,678 at December 31, 2012 to write off the License Agreement (see Note 4).

Revenue Recognition

The Company recognizes revenue when all four of the following criteria are met: (i) pervasive evidence that an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the amounts earned can be readily determined; and (iv) collectability of the amounts earned is reasonably assured. Amounts received for upfront technology license fees under multiple-element arrangements are deferred and recognized over the period of committed services or performance, if such arrangements require the Company's on-going services or performance.

The Company records research grant revenues when the expenses related to the grant projects are incurred. Amounts received under research grants are nonrefundable, regardless of the success of the underlying research, to the extent that such amounts are expended in accordance with the approved grant project.

Employee Stock Options and Stock-Based Compensation

All share-based payments to employees, including grants of employee stock options, are recognized in the financial statements based on their fair values. For options granted during the year ended December 31, 2012 and 2011, the fair value of each option award was estimated using the Black-Scholes option-pricing model and the following assumptions:

	Years Ended December 31,			
	2012		2011	
Risk-free interest rate	0.30	%	2.80	%
Expected dividend yield	0	%	0	%
Expected volatility	176	%	107	%
Expected life	10 years		7 years	

Expected volatility is based on the historical volatility of the Company's stock. The Company also uses historical data to estimate the expected term of options granted and employee termination rates. The risk-free rate for periods within the expected useful life of the options is based on the U.S. Treasury yield curve in effect at the time of grant.

Stock options and warrants issued to non-employees as compensation for services to be provided to the Company are accounted for based upon the fair value of the services provided or the estimated fair value of the option or warrant, whichever can be more clearly determined. Management utilizes the Black-Scholes option-pricing model to determine the fair value of the stock options and warrants issued by the Company. The Company recognizes this expense over the period in which the services are provided.

The Company issues new shares to satisfy stock option and warrant exercises. There were no options exercised during the years ended December 31, 2012 and 2011.

Income Taxes

The Company accounts for income taxes under an asset and liability approach for financial accounting and reporting for income taxes. Accordingly, the Company recognizes deferred tax assets and liabilities for the expected impact of differences between the financial statements and the tax basis of assets and liabilities.

The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its recorded amount, an adjustment to the deferred tax assets would be credited to operations in the period such determination was made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to operations in the period such determination was made.

Pursuant to Internal Revenue Code Sections 382 and 383, use of the Company's net operating loss and credit carryforwards may be limited if a cumulative change in ownership of more than 50% occurs within any three-year period since the last ownership change. The Company may have had a change in control under these Sections. However, the Company does not anticipate performing a complete analysis of the limitation on the annual use of the net operating loss and tax credit carryforwards until the time that it projects it will be able to utilize these tax attributes.

As of December 31, 2012, the Company did not have any unrecognized tax benefits related to various federal and state income tax matters.

The Company is subject to U.S. federal income tax as well as income tax of multiple state tax jurisdictions. The Company is currently open to audit under the statute of limitations by the Internal Revenue Service for the years ending December 31, 2010 through 2013. The Company and its subsidiary's state income tax returns (prior to the Pier merger) are open to audit under the statute of limitations for the years ended December 31, 2009 through 2013. The Company does not anticipate any material amount of unrecognized tax benefits within the next 12 months.

The Company is currently delinquent with respect to its U.S. federal and applicable states income tax filings for the years ended December 31, 2013 and 2012, and no potential penalties, interest or other charges have been provided for in the Company's financial statements because no income was generated during those periods.

Foreign Currency Transactions

The note payable to related party, which is denominated in a foreign currency (the South Korean Won), is translated into the Company's functional currency (the United States dollar) at the exchange rate on the balance sheet date. The foreign currency exchange gain or loss resulting from translation is recognized in the related consolidated statement of operations.

Research and Development Costs

Costs related to research and development activities are charged to operations in the period incurred.

Comprehensive Income (Loss)

Components of comprehensive income or loss, including net income or loss, are reported in the financial statements in the period in which they are recognized. Comprehensive income or loss is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. Net income (loss) and other comprehensive income (loss), including unrealized gains and losses on investments, are reported net of any related tax effect to arrive at comprehensive income (loss). The Company did not have any items of comprehensive income (loss) for the years ended December 31, 2012 or 2011.

Net Loss per Share

The Company's computation of earnings per share ("EPS") includes basic and diluted EPS. Basic EPS is measured as the income (loss) available to common shareholders divided by the weighted average common shares outstanding for the period. Diluted EPS is similar to basic EPS but presents the dilutive effect on a per share basis of potential common shares (e.g., warrants and options) as if they had been converted at the beginning of the periods presented, or issuance date, if later. Potential common shares that have an anti-dilutive effect (i.e., those that increase income per share or decrease loss per share) are excluded from the calculation of diluted EPS.

Loss per common share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the respective periods. Basic and diluted loss per common share is the same for all periods presented because all warrants and stock options outstanding are anti-dilutive.

At December 31, 2012 and 2011, the Company excluded the outstanding securities summarized below, which entitle the holders thereof to acquire shares of common stock, from its calculation of earnings per share, as their effect would have been anti-dilutive.

	December 31,	
	2012	2011
Convertible preferred stock	3,679	3,679
Warrants	12,357,884	25,818,319
Stock options	10,754,155	10,800,856
Total	23,115,718	36,622,854

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual amounts may differ from those estimates.

Recent Accounting Pronouncements

In December 2011, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2011-11, Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities. ASU 2011-11 requires an entity to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position. The new guidance will be applied retrospectively and is effective for annual and interim reporting periods beginning on or after January 1, 2013. The Company does not expect adoption of this new guidance to have any impact on its consolidated financial statement presentation or disclosures.

In July 2012, the FASB issued ASU No. 2012-02, Intangibles - Goodwill and Other (Topic 350): Testing Indefinite-Lived Intangible Assets for Impairment. ASU 2012-02 allows entities the option to first assess qualitative factors to determine whether it is necessary to perform the quantitative impairment test. If the qualitative assessment indicates that it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no testing is required. The new guidance is effective for the Company in the period beginning January 1, 2013. The Company does not expect the adoption of this new guidance to have any impact on its consolidated financial statement presentation or disclosures.

In April 2014, the FASB issued ASU No. 2014-08, Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360). ASU 2014-08 amends the requirements for reporting discontinued operations and requires additional disclosures about discontinued operations. Under ASU 2014-08, only disposals representing a strategic shift in operations or that have a major effect on the Company's operations and financial results should be presented as discontinued operations. This new guidance is effective for annual periods beginning after December 15, 2014. As the Company is engaged in research and development activities and the Company's planned principal operations have not yet commenced, the Company does not expect the adoption of this new guidance to have any impact on the Company's consolidated financial statement presentation or disclosures.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current U.S. GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. ASU 2014-09 also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The new guidance is effective for reporting periods beginning after December 15, 2016, and early adoption is not permitted. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. As the Company does not expect to have any operating revenues for the foreseeable future, the Company does not expect the adoption of this new guidance to have any impact on the Company's consolidated financial statement presentation or disclosures.

Management does not believe that any other recently issued, but not yet effective, authoritative guidance, if currently adopted, would have a material impact on the Company's financial statement presentation or disclosures.

Reclassifications

Certain comparative figures in 2011 have been reclassified to conform to the current year's presentation. These reclassifications were not material, either individually or in the aggregate.

3. Merger with Pier Pharmaceuticals, Inc.

On August 10, 2012, pursuant to an Agreement and Plan of Merger by and among Pier, a privately-held corporation, Pier Acquisition Corp., a Delaware corporation ("Merger Sub") and a wholly-owned subsidiary of Cortex, and Cortex, Merger Sub merged with and into Pier and Pier became a wholly-owned subsidiary of Cortex. Pier was formed in June 2007 (under the name SteadySleep Rx Co.) as a clinical stage pharmaceutical company to develop a pharmacologic treatment for the respiratory disorder known as obstructive sleep apnea and had been engaged in research and clinical development activities since formation. As a result, the Company acquired 100% of the issued and outstanding equity securities of Pier.

In connection with the merger transaction with Pier, the Company issued 58,417,893 newly issued shares of its common stock with an aggregate fair value of $3,271,402 ($0.056 per share), based upon the closing price of the Company's common stock on August 10, 2012. The shares of common stock were issued to stockholders, convertible note holders, warrant holders, option holders, and certain employees and vendors of Pier in satisfaction of their interests and claims. The common stock issued by the Company represented approximately 41% of the 144,041,556 common shares outstanding immediately following the closing of the transaction.

Pier was formed on June 25, 2007 as a closely-held clinical stage pharmaceutical company to develop a pharmacologic treatment for the respiratory disorder known as obstructive sleep apnea and has been engaged in research and early clinical development activities since formation. Pier was a development stage company, as it had not commenced any revenue-generating operations, did not have any cash flows from operations, and was dependent on debt and equity funding to finance its operations.

On October 10, 2007, Pier obtained the basis for its research and clinical development activities by entering into a License Agreement with the University of Illinois. The License Agreement covered certain patents and patent applications in the United States and other countries claiming the use of certain compounds referred to as cannabinoids, of which dronabinol is a specific example, for the treatment of breathing-related sleep disorders (including sleep apnea). Dronabinol is a synthetic derivative of the naturally occurring substance in the cannabis plant, otherwise known as Δ9-THC (Δ9-tetrahydrocannabinol). Pier's business plan was to determine whether dronabinol administration to humans would significantly improve subjective and objective clinical measures in patients with obstructive sleep apnea. In addition, Pier intended to evaluate the feasibility and comparative efficacy of a proprietary formulation of dronabinol.

The License Agreement granted Pier, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the License Agreement, that were then held by the University of Illinois; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the License Agreement, subject to the provisions of the License Agreement. Pier was required under the License Agreement to pay the University of Illinois a license fee, royalties, patent costs and certain milestone payments.

The License Agreement was the basis for Pier's research and development activities, and was Pier's primary asset and its only intellectual property asset. By providing Cortex with the means to expand its respiratory disorders program, the License Agreement was the central reason that Cortex entered into the merger transaction with Pier in August 2012.

The transaction brought together a series of unique drug products that in preclinical animal models and early clinical studies have shown efficacy in preventing or reversing drug-induced respiratory depression and in reducing obstructive, central and mixed sleep apneas. Phase 2 clinical assets include Cortex's CX1739, a compound targeting opiate-induced respiratory depression and central sleep apnea, and Pier's dronabinol, a compound that was, at the time, about to begin a Phase 2B study in obstructive sleep apnea patients that was funded entirely by a National Institutes of Health grant of nearly $5 million. Subsequent to the closing of the transaction, the Company intended to focus entirely on treatments for breathing disorders, and expected to have multiple opportunities for value-generating clinical milestones with dronabinol and CX1739.

Pursuant to the terms of the transaction, the Company agreed to issue contingent consideration, consisting of up to approximately 18,300,000 additional shares of common stock, to Pier's former security holders and certain parties that received the Company's common stock as part of the Pier transaction if certain of the Company's stock options and warrants outstanding immediately prior to the closing of the merger were subsequently exercised. In the event that such contingent shares were issued, the ownership percentage of Pier's former security holders and other parties, following their receipt of such additional shares, could not exceed their ownership percentage as of the initial transaction date.

The stock options and warrants outstanding at June 30, 2012 were all out-of-the-money on August 10, 2012 and during the period from August 10, 2012 through December 31, 2012. During late July and early August 2012, the Company issued options to officers and directors at that time to purchase a total of 7,361,668 shares of common stock exercisable for ten years at $0.06 per share (see Note 8). By October 1, 2012 (and thereafter), these options were consistently out-of-the-money.

All of the aforementioned options and warrants became increasingly out-of-the-money as December 31, 2012 approached (with most options and warrants being out of the money by multiples of the exercise price at such date), reflecting the fact that the Company's prospects were very negative because it was unable to raise operating capital

subsequent to its acquisition of Pier, had run out of working capital and essentially ceased business operations during the fourth quarter of 2012, had not filed its September 30, 2012 Form 10-Q Quarterly Report with the U.S. Securities and Exchange Commission due on November 14, 2012, had accepted the resignations of most of its officers and directors, and had prepared to shut-down and liquidate.

Accordingly, the Company concluded that the issuance of the contingent stock consideration was remote, given the large spread between exercise prices of these stock options and warrants as compared to the common stock trading range, the expiration of most of the lower priced option and warrants within two years, the Company's distressed financial condition and capital requirements, and that these stock options and warrants have remained and have become increasingly out-of-the-money, and have continued to expire, as time passes. Accordingly, the Company considered the fair value of the contingent consideration to be functionally zero and therefore did not ascribe any value to such contingent consideration; if any such shares are ultimately issued to the former Pier shareholders, the Company will recognize the fair value of such shares as a charge to operations.

The Company agreed to file a registration statement on Form S-1 under the Securities Act of 1933, as amended, with the SEC within ninety days after the closing of the transaction covering the shares of common stock issued to the former Pier shareholders, as well as the contingent shares, and to take certain other actions to maintain the effectiveness of such registration statement for a period not exceeding three years. The Company has not filed this registration statement. The Agreement and Plan of Merger did not provide for any financial penalties in the event that the Company failed to comply with the registration statement filing requirements.

The Company accounted for the Pier transaction pursuant to ASC Topic 805, Business Combinations. The Company identified and evaluated the fair value of the assets acquired. Based on the particular facts and circumstances surrounding the history and status of Pier, including its business and intellectual property at the time of the merger transaction, the Company determined that the identifiable intangible assets were comprised solely of a contract-based intangible asset, and that there was no measurable goodwill.

The intangible asset acquired in the Pier transaction consisted of the License Agreement. Unless terminated earlier, the License Agreement would terminate upon expiration or termination of all patent rights. The License Agreement defined patent rights as all of the University of Illinois' rights in the patents and patent applications, and (b) all of the University of Illinois' rights in all divisions, continuations, CIPs, reissues, renewals, re-examinations, foreign counterparts, substitutions or extensions thereof. Based upon the expiration date of the underlying patents, the License Agreement would be amortized on a straight-line basis over the remaining life of the underlying patents of 172 months from the date of acquisition.

The following table summarizes the fair value of the assets acquired and liabilities assumed by the Company at the closing of the Pier transaction on August 10, 2012.

Fair value of assets acquired:	
Cash	$23,208
Other current assets	698
Equipment	3,463
License agreement	3,411,157
Total assets acquired	$3,438,526
Consideration transferred by the Company:	
Fair value of common shares issued	$3,271,402
Liabilities assumed	167,124
Total consideration paid	$3,438,526

The following pro forma operating data presents the results of operations for the years ended December 31, 2012 and 2011, as if the merger had occurred on the first day of each period presented. Merger transaction costs incurred by both Pier and the Company of $1,621,993 for the year ended December 31, 2012 are not included in the net loss below. The pro forma results are not necessarily indicative of the financial results that might have occurred had the merger transaction actually taken place on the respective dates, or of future results of operations. Pro forma information for the years ended December 31, 2012 and 2011 is summarized as follows:

	Years Ended December 31,

	2012	2011
Total revenues	$48,309	$3,114,605
Net Loss	$(6,679,370)	$(3,268,002)
Net loss per common share - Basic and diluted	$(0.05)	$(0.02)
Weighted average common shares outstanding - Basic and diluted	144,041,556	138,406,759

As a condition of the Pier transaction, positions for two of Cortex's executive officers were eliminated and thus the severance agreements for such executive officers were amended. As amended, the severance agreements provided for the grant of fully vested, ten-year options to purchase up to a total of 5,166,668 shares of the Company's common stock at an exercise price of $0.06 per share, which was in excess of the closing price of the Company's common stock on the closing date of the Pier acquisition. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model was determined to be $310,000 ($0.06 per share) and was charged to merger costs on August 10, 2012. The Black-Scholes option-pricing model utilized the following inputs: exercise price per share-$0.06; stock price per share – $0.056; expected dividend yield – 0.00%; expected volatility – 176%; average risk-free interest rate – 0.31%; expected life – 10 years. As amended, the severance agreements also required the payment of $429,231 for various other amounts due the two executive officers. As of August 10, 2012, these amounts were accrued and charged to merger costs. As a result of the management change that occurred on March 22, 2013, these officers asserted claims against the Company (see Note 12).

Pier merger-related costs for the year ended December 31, 2012 are summarized as follows:

Direct merger costs	$506,876
Merger-related severance and termination costs	739,231
Total	$1,246,107

The License Agreement was terminated effective March 21, 2013 due to the Company's failure to make a required payment (see Note 4). New management subsequently opened negotiations with the University of Illinois, as a result of which the Company ultimately entered into a new license agreement with the University of Illinois on June 27, 2014 that is similar, but not identical, to the License Agreement that had been terminated on March 21, 2013 (see Note 12).

4. Impairment and Termination of University of Illinois License Agreement

At December 31, 2012, the Company was obligated to pay a $75,000 milestone fee to the University of Illinois under the License Agreement (see Note 3). At such date, due to the Company's distressed financial condition, lack of working capital and inability to raise additional operating capital, the Company was unable to make such payment on a timely basis, or within the 30-day cure period.

Accordingly, at December 31, 2012, the Company concluded that the License Agreement would be forfeited during the first quarter of the 2013 fiscal year and it had no expected future value to the Company. Accordingly, the License Agreement was impaired at December 31, 2012, as a result of which the Company recorded a charge to operations of $3,321,678 at December 31, 2012 (reflecting the remaining unamortized carrying value of the License Agreement at December 31, 2012).

Subsequently, on February 19, 2013, the University of Illinois notified the Company that it had defaulted under the License Agreement due to non-payment of the $75,000 milestone fee due December 31, 2012. On March 22, 2013, the University of Illinois notified the Company that the License Agreement had been terminated effective March 21, 2013 due to the Company's failure to make the required $75,000 payment.

5. Note Payable to Related Party

On June 25, 2012, the Company borrowed 465,000,000 Won (the currency of South Korea, equivalent to approximately $400,000 US dollars) from and executed a secured note payable to SY Corporation Co., Ltd., formerly known as Samyang Optics Co. Ltd. (“Samyang”), an approximately 20% common shareholder in the Company at that time. The note accrues simple interest at the rate of 12% per annum and has a maturity date of June 25, 2013, although Samyang was permitted to demand early repayment of the promissory note on or after December 25, 2012. Samyang did not demand early repayment. The promissory note is currently due and payable.

Pursuant to the terms of this borrowing arrangement, Samyang was granted the right to designate a representative to serve on the Company’s Board of Directors, pursuant to which Samyang designated Moogak Hwang, Ph.D. as its representative. In this regard, the Company elected Dr. Hwang to its Board of Directors on August 3, 2012.

The Company has not made any payments on the note, nor has Samyang made any demand for repayment. The note, including accrued interest, is currently due and payable.

The promissory note is secured by collateral that represents a lien on certain patents owned by the Company, including composition of matter patents for certain of the Company’s high impact ampakine compounds and the low impact ampakine compounds CX2007 and CX2076, and other related compounds. The security interest does not extend to the Company’s patent for its ampakine CX1739 or to the patent for the use of ampakine compounds for the treatment of respiratory depression.

In connection with this financing, the Company issued to Samyang two-year detachable warrants to purchase 4,000,000 shares of the Company's common stock at an exercise price of $0.056 per share. The warrants have a call right for consideration of $0.001 per share, in favor of the Company, to the extent that the weighted average closing price of the Company's common stock exceeds $0.084 per share for each of ten consecutive trading days, subject to certain circumstances. Additionally, an existing license agreement with Samyang was expanded to include rights to ampakine CX1739 in South Korea for the treatment of sleep apnea and respiratory depression. The warrants expired unexercised on June 25, 2014.

The Company considered the face amount of the note payable as a fair approximation of its value. The Company used the Black-Scholes option-pricing model to estimate the fair value of the two-year detachable warrants to purchase 4,000,000 shares of the Company's common stock at an exercise price of $0.056 per share. The Company applied the relative fair value method to allocate the proceeds from the borrowing to the note payable and the detachable warrants. The Company did not consider the expansion of the existing license agreement with Samyang to have any significant value. Consequently, approximately 64% of the proceeds of the borrowing were attributed to the debt instrument.

The 36% value attributed to the warrant is being amortized as additional interest expense over the life of the note. Additionally, financing costs aggregating $21,370 incurred in connection with the transaction are also being amortized over the expected life of the note. In that repayment could be demanded after six months, that period was used as the expected life of the note payable for amortization purposes.

Note payable to Samyang consists of the following at December 31, 2012:

Principal amount of note payable	$399,774
Accrued interest payable	25,340
Foreign currency transaction adjustment	40,278
	$465,392

6. Furniture, Equipment and Leasehold Improvements

Furniture, equipment and leasehold improvements consist of the following at December 31, 2012 and December 31, 2011:

	December 31,	
	2012	2011
Laboratory equipment	$—	$59,822

Leasehold improvements	— 766,905
Furniture and equipment	— 170,447
Computers and software	— 173,675
	— 1,170,849
Accumulated depreciation	— (1,103,967)
	$—$66,882

During the years ended December 31, 2012 and 2011, the Company disposed of furniture, equipment and leasehold improvements costing a total of $1,170,849 and $1,599,869, respectively, in connection with the downsizing of the Company's operations.

In March 2013, the Company vacated its operating facility prior to the scheduled termination of its lease. Subsequently, the Company received notice that it was being sued in the Superior Court of California by its former landlord seeking among other things, past due rent and reasonable attorney fees. On May 23, 2013, a settlement was reached wherein the Company agreed to relinquish its security deposit in the amount of $29,545, transfer title to its remaining furniture, equipment and leasehold improvements, and pay an additional $26,000, which was timely paid in 2013. The transfer of the Company's furniture, equipment and leasehold improvements resulted in a loss of $39,126, which, because the Company had substantially abandoned these assets prior to December 31, 2012, was charged to operations at December 31, 2012.

7. Project Advance

In June 2000, the Company received $247,300 from the Institute for the Study of Aging (the "Institute") to fund testing of CX516, the Company's ampakine in patients with mild cognitive impairment ("MCI"). Patients with MCI represent the earliest clinically-defined group with memory impairment beyond that expected for normal individuals of the same age and education, but such patients do not meet the clinical criteria for Alzheimer's disease. During 2002 and 2003, the Company conducted a double-blind, placebo-controlled clinical study with 175 elderly patients displaying MCI and issued a final report on June 21, 2004. CX516 did not improve the memory impairments observed in these patients.

Pursuant to the funding agreement, if the Company complied with certain conditions, including the completion of the MCI clinical trial, the Company would not be required to make any repayments unless and until the Company enters one of its ampakine compounds into a Phase 3 clinical trials for Alzheimer's disease. Upon initiation of such clinical trials, repayment would include the principal amount plus accrued interest computed at a rate equal to one-half of the prime lending rate. In the event of repayment, the Institute could elect to receive the outstanding principal balance and any accrued interest thereon in shares of the Company's common stock. The conversion price for such form of repayment was initially set at $4.50 per share and was subject to adjustment if the Company paid a dividend or distribution in shares of common stock, effected a stock split or reverse stock split, effected a reorganization or reclassification of its capital stock, or effected a consolidation or merger with or into another corporation or entity. Included in the consolidated balance sheets is principal and accrued interest with respect to this funding agreement in the amount of $330,022 and $323,779 at December 31, 2012 and 2011, respectively. The Company has not conducted and currently has no plans to conduct the above mentioned Phase 3 Alzheimer's study.

The Company entered into an agreement with the Institute on September 2, 2014 to settle this obligation by issuing 1,000,000 shares of the Company's restricted common stock (see Note 12). The note payable, including accrued interest, had an approximate balance of $337,000 on such date.

8. Stockholders' Equity

Preferred Stock

The Company has authorized a total of 5,000,000 shares of preferred stock, par value $0.001 per share. As of December 31, 2012 and 2011, 1,250,000 shares were designated as 9% Cumulative Convertible Preferred Stock (non-voting, "9% Preferred"); 37,500 shares were designated as Series B Convertible Preferred Stock (non-voting, "Series B Preferred"); 205,000 were designated as Series A Junior Participating Preferred Stock (non-voting, "Series A Junior Participating") and 3,507,500 shares were undesignated and may be issued with such rights and powers as the

Board of Directors may designate.

None of the 9% Preferred shares or the Series A Junior Participating shares were outstanding during the years ended December 31, 2012 and 2011.

Series B Preferred shares outstanding as of December 31, 2012 and 2011 consisted of 37,500 shares issued in a May 1991 private placement. Each share of Series B Preferred is convertible into approximately 0.09812 shares of common stock at an effective conversion price of $6.795 per share of common stock, which is subject to adjustment under certain circumstances. As of December 31, 2012 and 2011, these shares of Series B Preferred outstanding are convertible into 3,679 shares of common stock. The Company may redeem the Series B Preferred for $25,001, equivalent to $0.6667 per share, an amount equal to its liquidation preference, at any time upon 30 days prior notice.

On March 14, 2014, the Company designated 1,700 shares of the previously undesignated shares of preferred stock as Series G Preferred Stock (see Note 12).

Common Stock and Common Stock Purchase Warrants

Under the terms of the Company's registered direct offering with several institutional investors in January 2007, the Company sold an aggregate of 5,021,427 shares of its common stock and warrants to purchase 3,263,927 shares of its common stock. The warrants had an exercise price of $1.66 per share and were exercisable on or before January 21, 2012. During the year ended December 31, 2007, the Company received approximately $443,000 from the partial exercise of such warrants. None of the remaining warrants to purchase 2,996,927 shares of the Company's common stock were exercised, and consequently, those warrants expired unexercised in January 2012.

Under the terms of the Company's registered direct offering with several institutional investors in August 2007, the Company sold an aggregate of 7,075,000 shares of its common stock and warrants to purchase 2,830,000 shares of its common stock. The warrants had an exercise price of $2.64 per share and were exercisable on or before August 28, 2012. In addition, the Company issued warrants to purchase an aggregate of 176,875 shares of its common stock to the placement agents in that offering. The placement agent warrants had an exercise price of $3.96 per share and were also exercisable on or before August 28, 2012. None of those investor or placement agent warrants were exercised, and consequently, those warrants to purchase 3,006,875 shares of the Company's common stock expired unexercised in August 2012.

In connection with the registered direct offering of the Company's 0% Series E Convertible Preferred Stock in April 2009, the Company issued warrants to purchase an aggregate of 6,941,176 shares of its common stock to a single institutional investor. The warrants had an exercise price of $0.3401 per share and were exercisable on or before October 17, 2012. In February 2010, the exercise price of these warrants was reduced to $0.2721 in exchange for the investor's consent and waiver with respect to the Company's completed financing transaction with Samyang in January 2010. The warrants were also subject to a call provision in favor of the Company. The Company also issued warrants to purchase an additional 433,824 shares of the Company's common stock to the placement agent for that transaction. These warrants had an exercise price of $0.26 per share and were subject to the same exercisability term as the warrants issued to the investor. None of those investor or placement agent warrants were exercised, and consequently, those warrants to purchase 7,375,000 shares of the Company's common stock expired unexercised in August 2012.

In connection with the private placement of the Company's Series F Convertible Preferred Stock in July 2009, the Company issued warrants to purchase an aggregate of 6,060,470 shares of its common stock to a single institutional investor. The warrants had an exercise price of $0.2699 per share and were exercisable on or before January 31, 2013. The Company also issued warrants to purchase an additional 606,047 shares of the Company's common stock to the placement agent for that transaction. These warrants had an exercise price of $0.3656 per share and were subject to the same exercisability term as the warrants issued to the investor. The warrants issued to the investor and the placement agent were subject to a call provision in favor of the Company. None of those investor or placement agent warrants were exercised, and consequently, those warrants to purchase 6,666,517 shares of the Company's common stock expired unexercised in January 2013.

In connection with the conversion of a promissory note issued to Samyang in June 2010, the Company issued to Samyang two-year warrants to purchase 4,081,633 shares of the Company's common stock at an exercise price of $0.206 per share. None of those warrants were exercised, and consequently, those warrants to purchase 4,081,633 shares of the Company's common stock expired unexercised in June 2012.

In October 2011, the Company completed a private placement of $500,000 in securities with Samyang Value Partners Co., Ltd., a wholly-owned subsidiary of Samyang. The transaction included the issuance of 6,765,466 shares of the Company's common stock and two-year warrants to purchase an additional 1,691,367 shares of its common stock. The warrants had an exercise price of $0.1035 per share and a call right in favor of the Company. None of those warrants were exercised, and consequently, those warrants to purchase 1,691,367 shares of the Company's common stock expired unexercised in October 2013. Related to this private placement, the Company and Samyang entered into a non-binding memorandum of understanding ("MOU") regarding a potential license agreement for rights to the ampakine CX1739 for the treatment of neurodegenerative diseases in South Korea. The MOU also provided Samyang with rights of negotiation to expand its territory into other South East Asian countries, excluding Japan, Taiwan and China, and to include rights to the high impact ampakine CX1846 for the potential treatment of neurodegenerative diseases. The related license agreement was subsequently completed in January 2012.

In connection with a private placement of debt on June 25, 2012, the Company issued to Samyang two-year detachable warrants to purchase 4,000,000 shares of the Company's common stock at an exercise price of $0.056 per share. The warrants have a call right for consideration of $0.001 per share, in favor of the Company, to the extent that the weighted average closing price of the Company's common stock exceeds $0.084 per share for each of ten consecutive trading days, subject to certain circumstances.

A summary of common stock warrant activity for the years ended December 31, 2012 and 2011 is presented in the tables below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Warrants outstanding at December 31, 2010	24,126,952	$ 0.740	
Issued	1,691,367	0.104	
Exercised	—	—	
Expired	—	—	
Warrants outstanding at December 31, 2011	25,818,319	0.700	
Issued	4,000,000	0.056	
Exercised	—	—	
Expired	(17,460,435)	0.587	
Warrants outstanding at December 31, 2012	12,357,884	$ 0.182	0.64
Warrants exercisable at December 31, 2011	25,818,319	$ 0.700	
Warrants exercisable at December 31, 2012	12,357,884	$ 0.182	0.64

The exercise prices of common stock warrants outstanding and exercisable are as follows at December 31, 2012:

Exercise Price	Warrants Outstanding (Shares)	Warrants Exercisable (Shares)	Expiration Date
$ 0.056	4,000,000	4,000,000	June 25, 2014
$ 0.100	1,691,367	1,691,367	October 20, 2013
$ 0.270	6,060,470	6,060,470	January 31, 2013
$ 0.370	606,047	606,047	January 31, 2013
	12,357,884	12,357,884	

Based on a fair market value of $0.03 per share on December 31, 2012, there was no intrinsic value attributed to exercisable but unexercised common stock warrants at December 31, 2012.

Stock Option and Stock Purchase Plan

The Company's 1996 Stock Incentive Plan (the "1996 Plan"), which terminated pursuant to its terms on October 25, 2006, provided for the granting of options and rights to purchase up to an aggregate of 10,213,474 shares of the Company's authorized but unissued common stock to qualified employees, officers, directors, consultants and other service providers. Options granted under the 1996 Plan generally vested over a three-year period, although some options granted to officers included more accelerated vesting. Options previously granted under the 1996 Plan generally expire ten years from the date of grant, but some options granted to consultants expire five years from the date of grant. Pursuant to the 1996 Plan, options are generally forfeited three months from the date of termination of an optionee's continuous service if such termination occurs for any reason other than permanent disability or death.

On March 30, 2006, the Company's Board of Directors approved the 2006 Stock Incentive Plan (the "2006 Plan"), which subsequently was approved by the Company's stockholders on May 10, 2006. Upon the approval of the 2006 Plan, no further options were granted under the 1996 Plan. The 2006 Plan provides for the granting of options and rights to purchase up to an aggregate of 9,863,799 shares of the Company's authorized but unissued common stock (subject to adjustment under certain circumstances, such as stock splits, recapitalizations and reorganization) to qualified employees, officers, directors, consultants and other service providers.

Under the 2006 Plan, the Company may issue a variety of equity vehicles to provide flexibility in implementing equity awards, including incentive stock options, nonqualified stock options, restricted stock grants, stock appreciation rights, stock payment awards, restricted stock units and dividend equivalents. The exercise price of stock options offered under the 2006 Plan must be at least 100% of the fair market value of the common stock on the date of grant. If the person to whom an incentive stock option is granted is a 10% stockholder of the Company on the date of grant, the exercise price per share shall not be less than 110% of the fair market value on the date of grant. Vesting and expiration provisions for options granted under the 2006 Plan are similar to those under the 1996 Plan. Pursuant to the 2006 Plan, options are generally forfeited ninety days from the date of termination of an optionee's continuous service if such termination occurs for any reason other than permanent disability or death.

Subject to any restrictions under federal or securities laws, the Chief Executive Officer may award stock options to new non-executive officer employees and consultants, with a market value at the time of hire equivalent to up to 100% of the employee's annual salary or the consultant's anticipated annual consulting fees. The Chief Executive Officer shall have the discretion to increase or decrease such awards based on market and recruiting factors subject to a limit per person in each case of options to purchase 50,000 shares. Additionally, on an annual basis, the Chief Executive Officer may grant continuing employees and consultants, based upon performance and subject to meeting objectives, a stock option for that number of shares up to 40% of the employee's annual salary or the consultant's annual fees, but not to exceed 50,000 shares per person per year. Any option grant exceeding 50,000 shares per person per year requires approval by the Compensation Committee of the Board of Directors or the full Board of Directors. These options shall be granted with an exercise price equal to the fair market value of the Company's common stock on the date of issuance, have a ten-year term, vest annually over a three-year period from the dates of grant and have other terms consistent with the 2006 Plan.

Under the 2006 Plan, each non-employee director is automatically granted options to purchase 30,000 shares of common stock upon commencement of service as a director and, each non-employee director is automatically granted additional options to purchase 30,000 shares of common stock on the date of the first meeting of the Board of Directors for the relative calendar year. The nonqualified options to non-employee directors have an exercise price equal to 100% of the fair market value of the common stock on the date of grant, have a ten-year term and vest annually over a three-year period from the dates of grant.

On August 3, 2012, fully vested, ten-year options to purchase a total of 2,195,000 shares of the Company's common stock at an exercise price of $0.06 per share, representing the closing price of the Company's common stock on the

date of issue, were granted to directors of the Company for past services. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $131,700 ($0.06 per share), which was charged to general and administrative expense on that date.

In July and August 2012, pursuant to severance agreements amended in connection with the merger transaction with Pier, fully-vested, ten-year options to purchase a total of 5,166,668 shares of the Company’s common stock at an exercise price of $0.06 per share, which was in excess of the closing price of the Company’s common stock on the closing date of the merger, were granted to two of the Company’s former executive officers. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $310,000 ($0.06 per share), which was charged to merger-related costs on the dates of grant.

The Company is no longer making awards under the 2006 Plan and has adopted, with stockholder approval, the 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan (see Note 11).

As of December 31, 2012, options to purchase an aggregate of 10,754,155 shares of common stock were exercisable under the Company's stock option plans. During the years ended December 31, 2012 and 2011, the Company did not issue any options to purchase shares of common stock with exercise prices below the fair market value of the common stock on the dates of grant.

A summary of stock option activity for the years December 31, 2012 and 2011 is presented in the tables below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Options outstanding at December 31, 2010	$12,141,640	$ 1.390	
Granted	180,000	0.130	
Expired	(258,665)	0.200	
Forfeited	(1,262,119)	1.590	
Options outstanding at December 31, 2011	10,800,856	1.380	
Granted	7,361,668	0.060	
Expired	(992,500)	0.899	
Forfeited	(6,415,869)	1.314	
Options outstanding at December 31, 2012	10,754,155	$ 0.557	7.63
Options exercisable at December 31, 2011	9,569,860	$ 1.530	
Options exercisable at December 31, 2012	10,754,155	$ 0.557	7.63

As all stock options outstanding were fully vested at December 31, 2012, there is no compensation expense to be recognized in future periods.

The exercise prices of common stock options outstanding and exercisable were as follows at December 31, 2012:

Exercise Price	Options Outstanding (Shares)	Options Exercisable (Shares)	Expiration Date

$ 0.060	1,238,333	1,238,333	August 3, 2022
$ 0.060	5,166,668	5,166,668	August 10, 2022
$ 0.130	90,000	90,000	March 1, 2021
$ 0.160	90,000	90,000	March 3, 2021
$ 0.200	1,320,000	1,320,000	August 22, 2019
$ 0.290	90,000	90,000	June 5, 2019
$ 0.540	400,000	400,000	January 18, 2018
$ 0.710	3,521	3,521	February 28, 2013
$ 0.720	3,472	3,472	March 31, 2013
$ 0.860	90,000	90,000	February 13, 2018
$ 0.970	200,000	200,000	August 13, 2018
$ 1.110	2,252	2,252	April 30, 2013
$ 1.120	75,000	75,000	February 6, 2017
$ 1.300	525,000	525,000	December 18, 2016
$ 1.720	1,453	1,453	July 31, 2013
$ 1.780	1,404	1,404	May 30, 2013
$ 1.800	1,389	1,389	June 30, 2013
$ 2.350	280,000	280,000	December 1, 2015
$ 2.680	250,000	250,000	December 16, 2014
$ 2.760	175,000	175,000	December 9, 2013
$ 2.950	750,000	750,000	January 30, 2016
$ 3.770	663	663	August 29, 2013
	10,754,155	10,754,155	

Based on a fair market value of $0.03 per share on December 31, 2012, there were no exercisable in-the-money stock options as of December 31, 2012. The outstanding stock options had zero intrinsic value at December 31, 2012.

As of December 31, 2012, the Company had reserved an aggregate of 3,679 shares for issuance upon conversion of the Series B Preferred; 12,357,884 shares for issuance upon exercise of warrants; 10,754,155 shares for issuance upon exercise of outstanding stock options; and 7,890,433 shares for issuance upon exercise of stock options available for future grant pursuant to the 2006 Plan. The Company expects to satisfy such stock obligations through the issuance of authorized but unissued shares of common stock.

For the years ended December 31, 2012 and 2011, stock-based compensation costs included in the statements of operations consisted of general and administrative expenses of $170,805 and $130,720, respectively, and research and development expenses of $8,513 and $(80,558), respectively.

Stockholder Rights Plan

On February 5, 2002, the Company's Board of Directors approved the adoption of a Stockholder Rights Plan to protect stockholder interests against takeover strategies that may not provide maximum stockholder value. A dividend of one Right (each, a "Right" and, collectively, the "Rights") for each outstanding share of the Company's common stock was distributed to stockholders of record on February 15, 2002. The Stockholder Rights Plan terminated and the related Rights expired by their terms on February 15, 2012.

9. Related Party Transactions

In 2012, Aurora Capital LLC provided investment banking services to Pier, a company that the Company acquired by merger on August 10, 2012 (see Note 3). For those services, Aurora Capital LLC received 2,971,792 shares of the Company's common stock in payment of its fee of $194,950. Both Arnold Lippa and Jeff Margolis, officers and directors of the Company since March 22, 2013, have indirect ownership interests in Aurora Capital LLC through interests held in its members.

See Notes 5 and 8 for a description of transactions with Samyang, a significant stockholder of the Company and a lender to the Company.

10. Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets as of December 31, 2012 and 2011 are summarized below.

	December 31, 2012	2011
Capitalized research and development costs	$317,000	$475,000
Research and development credits	3,239,000	3,239,000
Stock-based compensation	980,000	2,299,000
Depreciation	—	137,000
Net operating loss carryforwards	35,072,000	33,796,000
Accrued compensation	361,000	96,000
Accrued interest due to related party	69,000	—
Other, net	42,000	37,000
Total deferred tax assets	40,080,000	40,079,000
Valuation allowance	(40,080,000)	(40,079,000)
Net deferred tax assets	$—	$—

In assessing the potential realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the Company attaining future taxable income during the periods in which those temporary differences become deductible. As of December 31, 2012 and 2011, management was unable to determine that it was more likely than not that the Company's deferred tax assets will be realized, and has therefore recorded an appropriate valuation allowance against deferred tax assets at such dates.

No federal tax provision has been provided for the years ended December 31, 2012 and 2011 due to the losses incurred during such periods. The Company's effective tax rate is different from the federal statutory rate of 35% due primarily to net losses that receive no tax benefit as a result of a valuation allowance recorded for such losses.

Reconciled below is the difference between the income tax rate computed by applying the U.S. federal statutory rate and the effective tax rate for the years ended December 31, 2012 and 2011.

	Years Ended December 31,	
	2012	2011
U. S. federal statutory tax rate	(35.0)%	(35.0)%
Non-deductible merger-related costs	1.8 %	— %
Non-deductible amortization and loss from termination of license	15.8 %	— %
State tax, net of federal tax benefit	— %	(5.8)%
Adjustment to deferred tax asset for expirations and forfeitures related to stock-based compensation	17.2 %	—%
Other adjustments to deferred tax asset	(0.3)%	(3.4)%
Change in valuation allowance	0.1 %	44.2 %
Other	0.4 %	— %
Effective tax rate	0.0 %	0.0 %

As of December 31, 2012, the Company had federal and California tax net operating loss carryforwards of approximately $86,067,000 and $89,194,000, respectively. The difference between the federal and California tax loss carryforwards was primarily attributable to the capitalization of research and development expenses for California franchise tax purposes. The federal and California net operating loss carryforwards will expire at various dates from 2013 through 2032. The Company also had federal and California research and development tax credit carryforwards that totaled approximately $2,093,000 and $1,146,000, respectively, at December 31, 2012. The federal research and development tax credit carryforwards will expire at various dates from 2013 through 2031. The California research and development tax credit carryforward does not expire and will carryforward indefinitely until utilized.

While the Company has not performed a formal analysis of the availability of its net operating loss carryforwards under Internal Revenue Code Sections 382 and 383, management expects that the Company's ability to use its net operating loss carryforwards will be limited in future periods.

11. Commitments and Contingencies

Pending or Threatened Legal Actions and Claims

The Company is periodically the subject of various pending and threatened legal actions and claims. In the opinion of management of the Company, adequate provision has been made in the Company's financial statements with respect to such matters.

The Company's former Vice President and Chief Financial Officer has asserted certain claims for compensation against the Company through the date of her resignation from the Company on October 26, 2012. The Company is engaged in negotiations with this party to resolve this matter in its entirety to avoid litigation, but there can be no assurances that the Company will be successful in such endeavor. To the extent that this former officer files a formal complaint or other legal claim against the Company, the Company intends to defend itself through the appropriate legal process and will consider all available options, including filing legal counter-claims. In the opinion of management, the Company has made adequate provision for any liability relating to this matter in its financial statements at December 31, 2012.

Lease Commitment

On May 14, 2012, the Company executed a three-year lease for office space beginning June 1, 2012 at a monthly rate of $9,204. In March 2013, the Company vacated its operating facilities prior to the scheduled termination of the lease. In May 2013, a settlement with the landlord was reached and the lease was terminated (see Note 6).

University of California, Irvine License Agreements

The Company entered into a series of license agreements in 1993 and 1998 with UCI that granted the Company proprietary rights to certain chemical compounds that acted as ampakines and their therapeutic uses. These agreements granted the Company, among other provisions, exclusive rights: (i) to practice certain patents and patent applications, as defined in the license agreement, that were then held by UCI; (ii) to identify, develop, make, have made, import, export, lease, sell, have sold or offer for sale any related licensed products; and (iii) to grant sub-licenses of the rights granted in the license agreements, subject to the provisions of the license agreements. The Company was required, among other terms and conditions, to pay UCI a license fee, royalties, patent costs and certain additional payments.

Under such license agreements, the Company was required to make minimum annual royalty payments of approximately $70,000. The Company was also required to spend a minimum of $250,000 per year to advance the ampakine compounds until the Company began to market an ampakine compound. The commercialization provisions in the agreements with UCI required the Company to file for regulatory approval of an ampakine compound before October 2012. In March 2011, UCI agreed to extend the required date for filing regulatory approval of an ampakine compound to October 2015. At December 31, 2012, the Company was not in compliance with its minimum annual payment obligations and believed that this default constituted a termination of the license agreements.

University of Alberta License Agreement

On May 8, 2007, the Company entered into a license agreement, as amended, with the University of Alberta granting the Company exclusive rights to practice patents held by the University of Alberta claiming the use of ampakines for the treatment of various respiratory disorders. The Company agreed to pay the University of Alberta a licensing fee and a patent issuance fee, which were paid, and prospective payments consisting of a royalty on net sales, sublicense fee payments, maintenance payments and milestone payments. The prospective maintenance payments commence on the enrollment of the first patient into the first Phase 2B clinical trial and increase upon the successful completion of the Phase 2B clinical trial. As the Company does not at this time anticipate scheduling a Phase 2B clinical trial, no maintenance payments are currently due and payable to the University of Alberta. In addition, no other prospective payments are currently due and payable to the University of Alberta.

12. Subsequent Events

Changes in Officers and Directors

On March 22, 2013, the Company received a written consent of stockholders holding a majority of the Company's common stock signed by Origin Ventures II LP, Illinois Emerging Technologies Fund, LP, Illinois Ventures LLC, Samyang Optics Co. Ltd., Samyang Value Partners Co., Ltd., Steven Chizzik, Kenneth M. Cohen, Peter Letendre, David W. Carley and Aurora Capital LLC (the "Written Consent") (i) removing Charles J. Casamento, M. Ross Johnson, John F. Benedik and Mark A. Varney from their positions as directors of the Company and (ii) appointing each of Arnold S. Lippa, Ph.D. and Jeff E. Margolis to fill two of the vacancies created, each to hold such office until the next annual meeting of the stockholders and until their successors have been duly elected and qualified. The Written Consent did not remove Moogak Hwang, Ph.D., a representative of Samyang Optics Co. Ltd., a lender to and significant stockholder of the Company (see Note 5), from the Board of Directors. Dr. Hwang continued to serve as a director until his resignation from the Board of Directors effective September 30, 2013 (see Note 5).

Following the delivery of the Written Consent, the Board of Directors, acting by unanimous written consent dated March 22, 2013, removed all officers of the Company and appointed Dr. Lippa, as Chairman of the Board, President and Chief Executive Officer and Mr. Margolis, as Vice President, Treasurer and Secretary. On April 29, 2013, Robert N. Weingarten was appointed as a director, Vice President and Chief Financial Officer.

On September 3, 2014, James Sapirstein and Kathryn MacFarlane were appointed as new directors of the Company. These two new directors are considered to be independent directors. In connection with those appointments and in conformity with its corporate policy of indemnifying all directors and officers, the Board of Directors also agreed at that time to enter into indemnification agreements for all directors and officers of the Company, namely, each existing director of the Company, Arnold S. Lippa, Jeff E. Margolis, and Robert N. Weingarten, each of whom is also an officer of the Company, and with the two new directors. Pursuant to the indemnity agreements, the Company will indemnify each director or officer when such individual is a party or threatened to become a party, by virtue of being a director or officer of the Company, from the costs and expenses, fines and certain other amounts in connection with certain proceedings, including proceedings in the right of the Company, so long as such director or officer acted in good faith and reasonably believed that such actions were not opposed to the best interests of the Company.

Termination of University of California, Irvine License Agreements

On April 15, 2013, the Company received a letter from UCI indicating that the license agreements between UCI and the Company had been terminated due to the Company's failure to make certain payments required to maintain the agreements. Since the patents covered in these license agreements had begun to expire and the therapeutic uses

described in these patents were no longer germane to the Company's new focus on respiratory disorders, the loss of these license agreements is not expected to have a material impact on the Company's current drug development programs. In the opinion of management, the Company has made adequate provision for any liability relating to this matter in its financial statements at December 31, 2012.

Working Capital Advances

On June 25, 2013, the Arnold Lippa Family Trust, an affiliate of Dr. Lippa, the Company's Chairman and Chief Executive Officer, began advancing funds to the Company in order to meet minimum operating needs. Such advances reached a maximum of $150,000 on March 3, 2014 and were due on demand with interest at a rate per annum equal to the "Blended Annual Rate", as published by the U.S. Internal Revenue Service, approximately 0.22% for period outstanding. In March 2014, the Company repaid the working capital advances, including accrued interest of $102, with the proceeds from the private placement of its Series G Preferred Stock described below.

Series G Preferred Stock Placement

On March 14, 2014, the Company filed a Certificate of Designation, Preferences, Rights and Limitations, (the "Certificate of Designation") of its Series G Preferred Stock ("Series G Preferred Stock") with the Secretary of State of the State of Delaware to amend the Company's certificate of incorporation. The number of shares designated as Series G Preferred Stock is 1,700 (which shall not be subject to increase without the written consent of a majority of the holders of the Series G Preferred Stock or as otherwise set forth in the Certificate of Designation). The initial Stated Value of each share of Series G Preferred Stock is $1,000.

The Company shall pay a stated dividend on the Series G Preferred Stock at a rate per share (as a percentage of the Stated Value per share) of 1.5% per annum, payable quarterly within 15 calendar days of the end of each fiscal quarter of the Company, in duly authorized, validly issued, fully paid and non-assessable shares of Series G Preferred Stock, which may include fractional shares of Series G Preferred Stock.

The Series G Preferred Stock shall be convertible, beginning 60 days after the last share of Series G Preferred Stock is issued in the Private Placement, at the option of the holder, into common stock at the applicable conversion price, at a rate determined by dividing the Stated Value of the shares of Series G Preferred Stock to be converted by the conversion price, subject to adjustments for stock dividends, splits, combinations and similar events as described in the form of Certificate of Designation. The stated value of the Series G Preferred Stock is $1,000 per share, and the initial conversion price is $0.0033. Accordingly, at the option of the holder, each share of Series G Preferred Stock is convertible commencing on the date that is 60 calendar days after the date on which the last share of Series G Preferred Stock is issued pursuant to a Purchase Agreement, into 303,030 shares of common stock. In addition, the Company has the right to require the holders of the Series G Preferred Stock to convert such shares into common stock under certain enumerated circumstances as set forth in the Certificate of Designation.

Upon either (i) a Qualified Public Offering (as defined in the Certificate of Designation) or (ii) the affirmative vote of the holders of a majority of the Stated Value of the Series G Preferred Stock issued and outstanding, all outstanding shares of Series G Preferred Stock, plus all accrued or declared, but unpaid, dividends thereon, shall mandatorily be converted into such number of shares of common stock determined by dividing the Stated Value of such Series G Preferred Stock (together with the amount of any accrued or declared, but unpaid, dividends thereon) by the Conversion Price (as defined in the Certificate of Designation) then in effect. If not earlier converted, the Series G Preferred Stock shall be redeemed by conversion on the two year anniversary of the date the last share of Series G Preferred Stock is issued in the Private Placement at the then applicable Conversion Price.

Except as described in the Certificate of Designation, holders of the Series G Preferred Stock will vote together with holders of the Company common stock on all matters, on an as-converted to common stock basis, and not as a separate class or series (subject to limited exceptions).

In the event of any liquidation or winding up of the Company prior to and in preference to any Junior Securities (including common stock), the holders of the Series G Preferred Stock will be entitled to receive in preference to the holders of the Company common stock a per share amount equal to the Stated Value, plus any accrued and unpaid dividends thereon.

On March 18, 2014, the Company entered into Securities Purchase Agreements with various accredited investors (the “Initial Purchasers”), pursuant to which the Company sold an aggregate of 753.22 shares of its Series G Preferred Stock for a purchase price of $1,000 per share, or an aggregate purchase price of $753,220. This financing represents the initial closing on a private placement of up to $1,500,000 (the “Private Placement”). The Initial Purchasers in this

tranche of the Private Placement consisted of (i) Arnold S. Lippa, the Company's Chairman, Chief Executive Officer and a member of the Company's Board of Directors, who invested $250,000, and (ii) new, non-affiliated, accredited investors. Neither the Series G Preferred Stock nor the underlying shares of common stock have any registration rights.

The placement agents and selected dealers in connection with the initial tranche of the Private Placement received cash fees totaling $3,955 as compensation and warrants totaling approximately 5.6365% of the shares of common stock into which the Series G Preferred Stock may convert, exercisable for five years at a price that is 120% of the conversion price at which the Series G Preferred Stock may convert into the Company's common stock. Aurora Capital LLC was one of the placement agents.

On April 17, 2014, the Company entered into Securities Purchase Agreements with various accredited investors (together with the Initial Purchasers, the "Purchasers"), pursuant to which the Company sold an aggregate of 175.28 shares of its Series G Preferred Stock, for a purchase price of $1,000 per share, or an aggregate purchase price of $175,280. This was the second and final closing on the Private Placement. The Purchasers in the second and final tranche of the Private Placement consisted of new, non-affiliated, accredited investors and non-management investors who had also invested in the first closing. One of the investors in this second and final closing was an affiliate of an associated person of Aurora Capital LLC. Neither the Series G Preferred Stock nor the underlying shares of common stock have any registration rights.

The placement agents and selected dealers in connection with the second tranche of the Private Placement received cash fees of $3,465 as compensation and warrants totaling approximately 12% of the shares of common stock into which the Series G Preferred Stock may convert, exercisable for five years at a price that is 120% of the conversion price at which the Series G Preferred Stock may convert into the Company's common stock. Aurora Capital LLC was one of the placement agents.

The stated value of the Series G Preferred Stock is $1,000 per share, and the initial conversion price is $0.0033. Accordingly, at the option of the holder, each share of Series G Preferred Stock is convertible commencing on the date that is sixty calendar days after the date on which the last share of Series G Preferred Stock is issued pursuant to a Purchase Agreement, into 303,030 shares of common stock. The aggregate of 928.5 shares of Series G Preferred Stock sold in the Private Placement are convertible into a total of 281,363,634 shares of common stock. The Company had 144,041,556 shares of common stock, plus an additional 57,000,000 shares of common stock issued to management on April 14, 2014, issued and outstanding immediately prior to the closing of the Private Placement of Series G Preferred Stock described herein.

The warrants that the placement agents and selected dealers received in connection with the Private Placement represent the right to acquire 19,251,271 shares of common stock exercisable for five years at a price that is 120% of the conversion price at which the Series G Preferred Stock may convert into the Company's common stock.

Purchasers in the Private Placement of the Series G Preferred Stock have executed written consents in favor of (i) approving and adopting an amendment to the Company's certificate of incorporation that increases the number of authorized shares of the Company to 1,405,000,000, 1,400,000,000 of which are shares of common stock and 5,000,000 of which are shares of preferred stock, and (ii) approving and adopting the Cortex Pharmaceuticals, Inc. 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan.

The shares of Series G Preferred Stock were offered and sold without registration under the Securities Act of 1933, as amended, in reliance on the exemptions provided by Section 4(a)(2) of the Securities Act as provided in Rule 506(b) of Regulation D promulgated thereunder. The shares of Series G Preferred Stock and the Company's common stock issuable upon conversion of the shares of Series G Preferred Stock have not been registered under the Securities Act or any other applicable securities laws, and unless so registered, may not be offered or sold in the United States except pursuant to an exemption from the registration requirements of the Securities Act.

Exercise of Placement Agent and Selected Dealer Warrants

Effective August 25, 2014, a warrant issued on April 17, 2014 in conjunction with the Private Placement of the Series G Preferred Stock, representing the right to acquire a total of 2,112,879 shares of common stock, was exercised in full

on a cashless basis, resulting in the net issuance of 1,942,124 shares of common stock.

Effective September 5, 2014, a warrant issued on April 17, 2014 in conjunction with the Private Placement of the Series G Preferred Stock, representing the right to acquire a total of 2,412,878 shares of common stock, was exercised in part (50%) on a cashless basis, resulting in the net issuance of 1,126,814 shares of common stock.

Effective September 26, 2014, a warrant issued on April 17, 2014 in conjunction with the Private Placement of the Series G Preferred Stock, representing the right to acquire a total of 1,400,000 shares of common stock, was exercised in full on a cashless basis, resulting in the net issuance of 1,326,080 shares of common stock.

Increase in Authorized Common Shares

The holders of the Series G Preferred Stock approved and adopted an amendment to increase the number of authorized shares of the Company to 1,405,000,000, 1,400,000,000 of which are shares of common stock and 5,000,000 of which are shares of preferred stock. The Company also sought, and on April 17, 2014 obtained by written consent, sufficient votes of the holders of its common stock, voting as a separate class, to effect the amendment. A certificate of Amendment to the Company's Certificate of Incorporation to effect the increase in the authorized shares was filed with the Secretary of State of the State of Delaware on April 17, 2014.

2014 Equity, Equity-Linked and Equity Derivative Incentive Plan

In connection with the Private Placement, the stockholders of the Company holding a majority of the votes to be cast on the issue approved the adoption of the Company's 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan (the "Plan"), which had been previously adopted by the Board of Directors of the Company, subject to stockholder approval. The Plan permits the grant of options and restricted stock with respect to up to 105,633,002 shares of common stock, in addition to stock appreciation rights and phantom stock, to directors, officers, employees, consultants and other service providers of the Company.

Awards to Officers and Directors as Compensation

On April 14, 2014, the Board of Directors of the Company awarded a total of 57,000,000 shares of common stock of the Company, including awards of 15,000,000 shares to each of the Company's three executive officers, who are also directors of the Company, and 12,000,000 shares to certain other parties, one of whom is an associated person of Aurora Capital LLC. These awards were made under the Plan and were awarded as compensation for those individuals through March 31, 2014. None of the officers or directors of the Company had received any cash compensation from the Company since joining the Company in March and April 2013.

On July 17, 2014, the Board of Directors of the Company awarded stock options to purchase a total of 15,000,000 shares of common stock of the Company, consisting of options for 5,000,000 shares to each of the Company's three executive officers, who are also directors of the Company. The stock options were awarded as compensation for those individuals through December 31, 2014. The awarded stock options vest in three equal installments on July 17, 2014 (at issuance), September 30, 2014, and December 31, 2014, and expire on July 17, 2019. The exercise price of the stock options of $0.05 per share was in excess of the closing market price of a share of the Company's common stock on the date of issuance. The Company believes and intends that a portion of the stock options awarded qualify as incentive stock options under the Internal Revenue Code of 1986, as amended. The issuance of incentive stock awards is restricted as to amount as set forth in the Plan, and the form of award of the awarded stock options reflects this

intention and the limits under the Plan.

In connection with the appointment of James Sapirstein and Kathryn MacFarlane as directors of the Company on September 3, 2014, the Board of Directors awarded an aggregate of 4,000,000 shares of common stock of the Company to the new directors, 2,000,000 to each new director, vesting 50% upon appointment to the Board of Directors, 25% on September 30, 2014 and 25% on December 31, 2014. These awards were made under the Company's 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan.

Debt Settlements

During the three months ended March 31, 2014, the Company executed settlement agreements with four former executives that resulted in the settlement of potential claims totaling approximately $1,336,000 for a total of approximately $118,000 in cash, plus the issuance of options to purchase 4,300,000 shares of common stock exercisable at $0.04 per share for periods ranging from five to ten years. In addition to other provisions, the settlement agreements included mutual releases.

During the three months ended June 30, 2014, the Company also executed settlement agreements with certain former service providers that resulted in the settlement of potential claims totaling approximately $591,000 for a cost of approximately $155,000 in cash, plus the issuance of options to purchase 1,250,000 shares of common stock exercisable at $0.04 per share for a period of five years. In addition to other provisions, the settlement agreements included mutual releases.

The aforementioned agreements resulted in the settlement of potential claims totaling approximately $1,927,000 for a cost of approximately $273,000 in cash, plus the issuance of options to purchase 5,550,000 shares of common stock exercisable at $0.04 per share for periods ranging from five to ten years. The Company continues to explore ways to reduce its indebtedness, and might in the future enter additional settlements of potential claims, including, without limitation, those by other former executives or third party creditors

Settlement with the Institute for the Study of Aging

On September 2, 2014, the Company entered into a Release Agreement (the "Release Agreement") with the Institute for the Study of Aging (the "Institute") to settle an outstanding promissory note, dated May 30, 2000, issued by the Company in favor of the Institute for an initial principal amount of $247,300 (the "Note"), which was made pursuant to an Agreement to Accept Conditions of Loan Support, also dated May 30, 2000 (the "Loan Support Agreement"). At August 31, 2014, the amount owed under the Note, including accrued interest was approximately $337,000. Pursuant to the terms of the Release Agreement, the Institute received 1,000,000 restricted shares of the Company's common stock as settlement of all obligations of the Company under the Note and the Loan Support Agreement. Such common shares are "restricted securities" as defined under Rule 144 promulgated under the Securities Act of 1933, as amended, and are not subject to any registration rights. The Release Agreement also includes a mutual release between the Company and the Institute, releasing each party from all claims up until the date of the Release Agreement.

University of Illinois 2014 Exclusive License Agreement

On June 27, 2014, the Company entered into an Exclusive License Agreement (the "2014 License Agreement") with the University of Illinois that was similar, but not identical, to the License Agreement between the parties that had been previously terminated on March 21, 2013. The 2014 License Agreement became effective on September 18, 2014, upon the completion of certain conditions set forth in the 2014 License Agreement, including (i) the payment by the Company of a $25,000 licensing fee, (ii) the payment by the Company of certain outstanding patent costs (not to exceed $16,000), and (iii) the assignment to the University of Illinois of certain rights the Company holds in certain patent applications. In exchange for certain milestone and royalty payments, the 2014 License Agreement granted the Company (i) exclusive rights to several issued and pending patents in numerous jurisdictions and (ii) the non-exclusive right to certain technical information that is generated by the University of Illinois in connection with certain clinical trials as specified in the 2014 License Agreement, all of which relate to the use of cannabinoids for the treatment of sleep related breathing disorders. The Company is developing dronabinol (Δ9-tetrahydrocannabinol), a cannabinoid, for the treatment of OSA, the most common form of sleep apnea.

National Institute on Drug Abuse Grant

On September 18, 2014, the Company entered into a grant agreement with the National Institute on Drug Abuse ("NIDA"), which is a division of the National Institutes of Health, for the Company's Phase 1 Small Business Innovation Research project entitled "Novel Treatment of Drug-Induced Respiratory Depression." The grant is valued at $148,583 and is to be paid in increments over the expected six-month duration of the study. The study will measure the potency, latency to onset and duration of action of the Company's proprietary soluble ampakine molecule, CX1942, administered to rats.

Appointment of Chairman of the Company's Scientific Advisory Board

On September 18, 2014, John Greer, Ph.D. was appointed to the position of Chairman of the Company's Scientific Advisory Board, which is currently being formed. Dr. Greer is the Director of the Neuroscience and Mental Health Institute at the University of Alberta. He holds two grants regarding research into neuromuscular control of breathing and is the inventor on the use patents licensed by the Company with respect to ampakines. Dr. Greer is expected to assist the Company in forming the rest of its Scientific Advisory Board.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CORTEX PHARMACEUTICALS, INC.

Date: October 14, 2014 By: */s/ Arnold S. Lippa, Ph.D.*
Arnold S. Lippa, Ph.D.
President and Chief Executive Officer

We, the undersigned directors and officers of Cortex Pharmaceuticals, Inc., do hereby constitute and appoint each of Arnold S. Lippa, Ph.D., Jeff E. Margolis. and Robert N. Weingarten as our true and lawful attorneys-in-fact and agents with power of substitution, to do any and all acts and things in our name and behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys-in-fact and agents, or either of them, may deem necessary or advisable to enable said corporation to comply with the Securities and Exchange Act of 1934, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this Annual Report on Form 10-K, including specifically but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto; and we do hereby ratify and confirm all that said attorney-in-fact and agent, shall do or cause to be done by virtue hereof.

In accordance with the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	**Title**	**Date**
/s/ Arnold S. Lippa, Ph.D. Arnold S. Lippa, Ph.D.	President, Chief Executive Officer (Principal Executive Officer), Director and Chairman of the Board	October 14, 2014
/s/ Robert N. Weingarten Robert N. Weingarten	Vice President, Chief Financial Officer (Principal Financial and Accounting Officer) and Director	October 14, 2014
/s/ Jeff E. Margolis Jeff E. Margolis	Vice President, Treasurer, Secretary and Director	October 14, 2014
/s/ James E. Sapirstein James E. Sapirstein	Director	October 14, 2014

/s/ Kathryn MacFarlane Kathryn MacFarlane	Director	October 14, 2014

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Cortex Pharmaceuticals, Inc.

Annual Report on Form 10-K

Year Ended December 31, 2012

Exhibit Index

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated as of August 10, 2012, by and among Cortex Pharmaceuticals, Inc., Pier Acquisition Corp. and Pier Pharmaceuticals, Inc., incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on August 16, 2012.
3.1	Second Restated Certificate of Incorporation dated May 19, 2010, incorporated by reference to the same numbered Exhibit to the Company's Current Report on Form 8-K filed May 24, 2010.
3.2	By-Laws of the Company, as adopted March 4, 1987, and amended on October 8, 1996, incorporated by reference to the same numbered Exhibit to the Company's Annual Report on Form 10-KSB filed October 15, 1996.
3.3	Certificate of Designation, Preferences, Rights and Limitations of Series G 1.5% Convertible Preferred Stock, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 24, 2014.
3.4	Certificate of Amendment of the Certificate of Incorporation of Cortex Pharmaceuticals, Inc., incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on April 18, 2014.
3.5	Certificate of Amendment of By-Laws of the Company, incorporated by reference to the same numbered Exhibit to the Company's Report on Form 8-K filed November 15, 2007.
4.3	Placement Agency Agreement, dated August 24, 2007, by and between Cortex Pharmaceuticals, Inc. and JMP Securities LLC and Rodman and Renshaw, LLC, Form of Subscription Agreement and Form of Common Stock Purchase Warrant issued by Cortex Pharmaceuticals, Inc., incorporated by reference to Exhibits 1.1, 1.2 and 4.1, respectively, to the Company's Report on Form 8-K filed August 27, 2007.
4.4	Placement Agency Agreement, dated April 13, 2009, by and between the Company and Rodman & Renshaw, LLC, Form of Securities Purchase Agreement and Form of Common Stock Purchase Warrant issued by the Company, incorporated by reference to Exhibits 1.1, 1.2 and 4.1, respectively, to the Company's Current Report on Form 8-K filed April 17, 2009.
10.1	License Agreement dated March 27, 1991 between the Company and the Regents of the University of California, incorporated by reference to the same numbered Exhibit to the Company's Amendment on

	Form 8 filed November 27, 1991 to the Company's Annual Report on Form 10-K filed September 30, 1991. (Portions of this Exhibit are omitted and were filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 under the Securities Exchange Act of 1934).
10.2	License Agreement dated June 25, 1993, as amended, between the Company and the Regents of the University of California, incorporated by reference to the same numbered Exhibit to the Company's Quarterly Report on Form 10-Q filed February 12, 2004. (Portions of this exhibit are omitted and were filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934).

10.3	Amended and Restated 1996 Stock Incentive Plan, incorporated by reference to the same numbered Exhibit to the Company's Quarterly Report on Form 10-Q as filed on November 14, 2002.*
10.4	Employment agreement dated May 17, 2000, between the Company and James H. Coleman, incorporated by reference to Exhibit 10.69 to the Company's Report on Form 10-QSB filed February 12, 2001.*
10.5	Severance agreement dated October 26, 2000, between the Company and Maria S. Messinger, incorporated by reference to Exhibit 10.70 to the Company's Quarterly Report on Form 10-QSB filed February 12, 2001.*
10.6	Employment agreement dated October 29, 2002 between the Company and Roger G. Stoll, Ph.D., incorporated by reference to Exhibit 10.74 to the Company's Quarterly Report on Form 10-Q, as filed on November 14, 2002.*
10.7	First Amendment dated August 8, 2003 to the employment agreement between the Company and Roger G. Stoll, Ph.D., incorporated by reference to Exhibit 10.76 to the Company's Annual Report on Form 10-K filed September 19, 2003.*
10.8	Form of Incentive/Nonqualified Stock Option Agreement under the Company's Amended and Restated 1996 Stock Incentive Plan, incorporated by reference to Exhibit 10.80 to the Company's Annual Report on Form 10-K filed on September 27, 2004.*
10.9	Form of Restricted Stock Award under the Company's Amended and Restated 1996 Stock Incentive Plan, incorporated by reference to Exhibit 10.81 to the Company's Annual Report on Form 10-K filed on September 27, 2004.*
10.10	Amendment dated January 1, 2004 to the employment agreement dated May 17, 2000 between the Company and James H. Coleman, incorporated by reference to Exhibit 10.82 to the Company's Annual Report on Form 10-K filed on September 27, 2004.*
10.11	Second Amendment dated November 10, 2004 to the employment agreement dated October 29, 2002 between the Company and Roger G. Stoll, Ph.D., incorporated by reference to Exhibit 10.86 to the Company's Quarterly Report on Form 10-Q filed on November 15, 2004.*
10.12	Form of Notice of Grant of Stock Options and Stock Option Agreement under the Company's Amended and Restated 1996 Stock Incentive Plan, incorporated by reference to Exhibit 10.88to the Company's Annual Report on Form 10-K filed March 21, 2005.*
10.13	Stock Ownership Policy for the Company's Directors and Executive Officers as adopted by the Company's Board of Directors on December 16, 2004, incorporated by reference to Exhibit 10.89 to the Company's Annual Report on Form 10-K filed March 21, 2005.*
10.14	Third Amendment dated August 13, 2005 to the employment agreement dated October 29, 2002 between the Company and Roger G. Stoll, Ph.D, incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed August 17, 2005.*
10.15	Employment letter of agreement dated January 9, 2006 between the Company and Mark Varney, Ph.D., incorporated by reference to Exhibit 10.92 to the Company's Annual Report on Form 10-K filed March 16, 2006.*

10.16	Non-qualified Stock Option Agreement dated January 30, 2006 between the Company and Mark Varney, Ph.D., incorporated by reference to Exhibit 10.93 to the Company's Quarterly Report on Form 10-Q filed May 9, 2006.*

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10.17	Cortex Pharmaceuticals, Inc. 2006 Stock Incentive Plan, incorporated by reference to Exhibit 10.94 to the Company's Report on Form 8-K filed May 11, 2006.*
10.18	Form of Notice of Grant of Stock Options and Stock Option Agreement under the Company's 2006 Stock Incentive Plan, incorporated by reference to Exhibit 10.96 to the Company's Quarterly Report on Form 10-Q filed August 8, 2006.*
10.19	Form of Incentive/Non-qualified Stock Option Agreement under the Company's 2006 Stock Plan, incorporated by reference to Exhibit 10.97 to the Company's Quarterly Report on Form 10-Q filed August 8, 2006.*
10.20	Negative Equity Agreement dated February 1, 2007 between the Company and Mark A. Varney, Ph.D., incorporated by reference to Exhibit 10.100 to the Company's Quarterly Report on Form 10-Q filed May 10, 2007.*
10.21	Amendment No. 1 to the Company's 2006 Stock Incentive Plan, incorporated by reference to Exhibit 10.101 to the Company's Current Report on Form 8-K filed May 15, 2007.*
10.22	Amendment to the Exclusive License Agreement between the Company and The Regents of the University of California, dated as of June 1, 2007, incorporated by reference to Exhibit 10.102 to the Company's Current Report on Form 8-K filed June 7, 2007.
10.23	Patent License Agreement between the Company and the University of Alberta, dated as of May 9, 2007, incorporated by reference to Exhibit 10.105 to the Company's Annual Report on Form 10-K filed March 17, 2008. (Portions of this Exhibit are omitted and were filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 under the Securities Exchange Act of 1934).
10.24	Severance Agreement dated May 2, 2008, between the Company and Steven A. Johnson, Ph.D., incorporated by reference to Exhibit 10.107 to the Company's Quarterly Report on Form 10-Q filed May 8, 2008.*
10.25	Fourth Amendment, dated July 11, 2008, to the employment agreement dated October 29, 2002 between the Company and Roger G. Stoll, Ph.D., incorporated by reference to Exhibit 10.109 to the Company's Report on Form 8-K filed July 17, 2008.*
10.26	Amendment No. 2 to Employment Agreement, dated as of December 22, 2008, between the Company and James H. Coleman, incorporated by reference to Exhibit 10.110 to the Company's Report on Form 8-K filed December 23, 2008.*
10.27	Amendment No. 1 Severance Agreement, dated as of December 22, 2008, between the Company and Maria S. Messinger, incorporated by reference to Exhibit 10.111 to the Company's Report on Form 8-K filed December 23, 2008.*
10.28	Employment Agreement, dated as of December 19, 2008, between the Company and Mark A. Varney, Ph.D., incorporated by reference Exhibit 10.112 to the Company's Report on Form 8-K filed December 23, 2008.*
10.29	Form of Retention Bonus Agreement, dated March 13, 2009, between the Company and each of its executive officers, incorporated by reference to Exhibit 10.113 to the Company's Current Report on Form 8-K filed March

19, 2009.*

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10.30	Securities Purchase Agreement, dated July 29, 2009, by and between the Company and the Investor, including a form of Registration Rights Agreement attached as Exhibit B thereto and a form of Common Stock Purchase Warrant attached as Exhibit C thereto, incorporated by reference to Exhibit 10.114 to the Company's Current Report on Form 8-K filed July 30, 2009.
10.31	Amendment No. 2 to the Company's 2006 Stock Incentive Plan, effective as of June 5, 2009, incorporated by reference Exhibit 10.115 to the Company's Quarterly Report on Form 10-Q filed August 14, 2009.*
10.32	Amendment No. 3 to the Company's 2006 Stock Incentive Plan, incorporated by reference to Exhibit 10.118 to the Company's Current Report on Form 8-K filed May 24, 2010.*
10.33	Sixth Amendment dated August 12, 2010 to the employment agreement dated October 29, 2002 between the Company and Roger G. Stoll, incorporated by reference to Exhibit 10.119 to the Company's Report on Form 8-K filed August 18, 2010.*
10.34	Amendment to the License Agreement between the Company and The Regents of the University of California, dated as of August 24, 2010, incorporated by reference to Exhibit 10.120 to the Company's Report on Form 8-K filed August 30, 2010
10.35	Fifth Amendment to the License Agreement between the Company and The Regents of the University of California, dated as of March 15, 2011, incorporated by reference to Exhibit 10.121 to the Company's Current Report on Form 8-K filed March 21, 2011.
10.36	Asset Purchase Agreement dated March 15, 2011 by and between the Company and Biovail Laboratories SRL, incorporated by reference to Exhibit 10.122 to the Company's Quarterly Report on Form 10-Q filed May 23, 2011. (Portions of this exhibit are omitted and were filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934).
10.37	First Amendment dated August 2, 2011 to the Employment Agreement dated December 19, 2008 between the Company and Mark A. Varney, Ph.D., incorporated by Exhibit 10.123 to the Company's Current Report on Form 8-K filed August 8, 2011.*
10.38	Seventh Amendment dated August 2, 2011 to the Employment Agreement dated October 29, 2002 between the Company and Roger G. Stoll, Ph.D., incorporated by reference to Exhibit 10.124 to the Company's Current Report on Form 8-K filed August 8, 2011.*
10.39	Patent Assignment and Option and Amended and Restated Agreement dated June 10, 2011 between the Company and Les Laboratoires Servier, incorporated by reference to Exhibit 10.125 to the Company's Quarterly Report on Form 10-Q filed August 18, 2011. (Portions of this exhibit are omitted and were filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.
10.40	Securities Purchase Agreement, dated January 15, 2010, by and between the Company and Samyang Optics Co. Ltd., including a form of Promissory Note attached as Exhibit A thereto and a form of Common Stock Purchase Warrant attached as Exhibit B thereto, incorporated by reference to Exhibit 10.116 to the Company's Current Report on Form 8-K filed January 21, 2010.

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10.41	Securities Purchase Agreement, dated October 20, 2011, by and between the Company and Samyang Value Partners Co., Ltd., including a form of Common Stock Purchase Warrant attached as Exhibit C thereto, incorporated by reference to Exhibit 10.127 to the Company's Annual Report on Form 10-K filed March 30, 2012.
10.42	Lease Agreement, dated May 17, 2012, for the Company's facilities in Irvine, California, incorporated by reference to Exhibit 10.128 to the Company's Quarterly Report on Form 10-Q filed on August 16, 2012.
10.43	Securities Purchase Agreement, dated June 25, 2012, by and between the Company and Samyang Optics Co. Ltd., including a form of Promissory Note attached as Exhibit A thereto, a form of Common Stock Purchase Warrant attached as Exhibit B thereto, and a form of Security Agreement attached as Exhibit C thereto, incorporated by reference to Exhibit 10.129 to the Company's Quarterly Report on Form 10-Q filed on August 16, 2012.
10.44	Form of Securities Purchase Agreement, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 24, 2014.
10.45	Cortex Pharmaceuticals, Inc. 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on March 24, 2014.*
10.46	Exclusive License Agreement, dated as of June 27, 2014, by and between the Board of Trustees of the University of Illinois, a body corporate and politic of the State of Illinois, and Cortex Pharmaceuticals, Inc., incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 1, 2014.
10.47	Form of Non-Statutory Stock Option Award Agreement, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 23, 2014.*
10.48	Form of Incentive Stock Option Award Agreement, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 23, 2014.*
10.49	Form of Restricted Stock Award Agreement, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on July 23, 2014.*
10.50	Release Agreement, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 5, 2014.
21**	Subsidiaries of the Registrant.
23.1**	Consent of Haskell & White LLP, Independent Registered Public Accounting Firm.
24**	Power of Attorney (included as part of the signature page of this Annual Report on Form 10-K).
31.1**	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934.
31.2**	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934.

32**	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350.

101.INS** XBRL Instance Document.

101.SCH** XBRL Taxonomy Extension Schema Document.

101.CAL** XBRL Taxonomy Extension Calculation Linkbase Document†

101.DEF** XBRL Taxonomy Extension Definition Linkbase Document.

101.LAB** XBRL Taxonomy Extension Label Linkbase Document.

101.PRE** XBRL Taxonomy Extension Presentation Linkbase Document.

* Each of these Exhibits constitutes a management contract, compensatory plan or arrangement.

** Filed herewith.